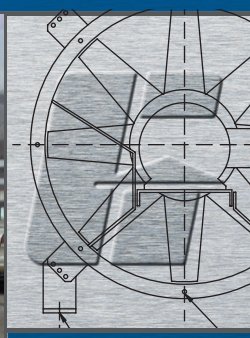
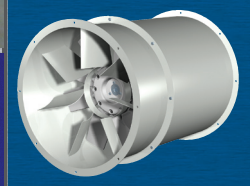
High Performance Axial Fans
Model AX
Performance Supplement





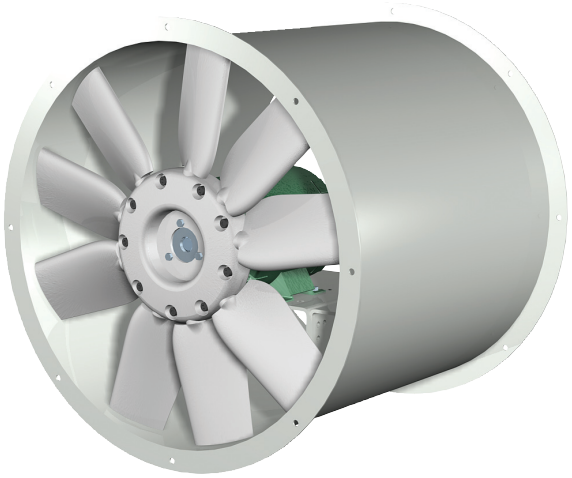
GREENHECK
Building Value in Air.

July
2004

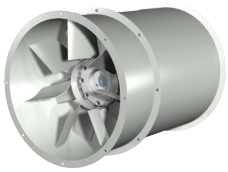
High Performance Axial Fans

GREENHECK
Building Value in Air.

Performance information is for the model AX standard configuration. Optional configurations include; upblast design with butterfly dampers and curb cap, detachable air straightening vane section, and shortened case. These options can effect performance. For estimated pressure drops on these accessories, consult your local Greenheck representative.



AX Upblast



AX Vane Section

AX Short Casing

amca CERTIFIED RATINGS
AIR PERFORMANCE
AIR MOVEMENT AND CONTROL ASSOCIATION, INC.

Greenheck certifies that the Model AX fan 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 comply with the requirements of the AMCA Certified Ratings Program.

Hubs and Blades

The AX blade shape and hub are designed to move high volumes of air with less power to save on long-term energy costs.

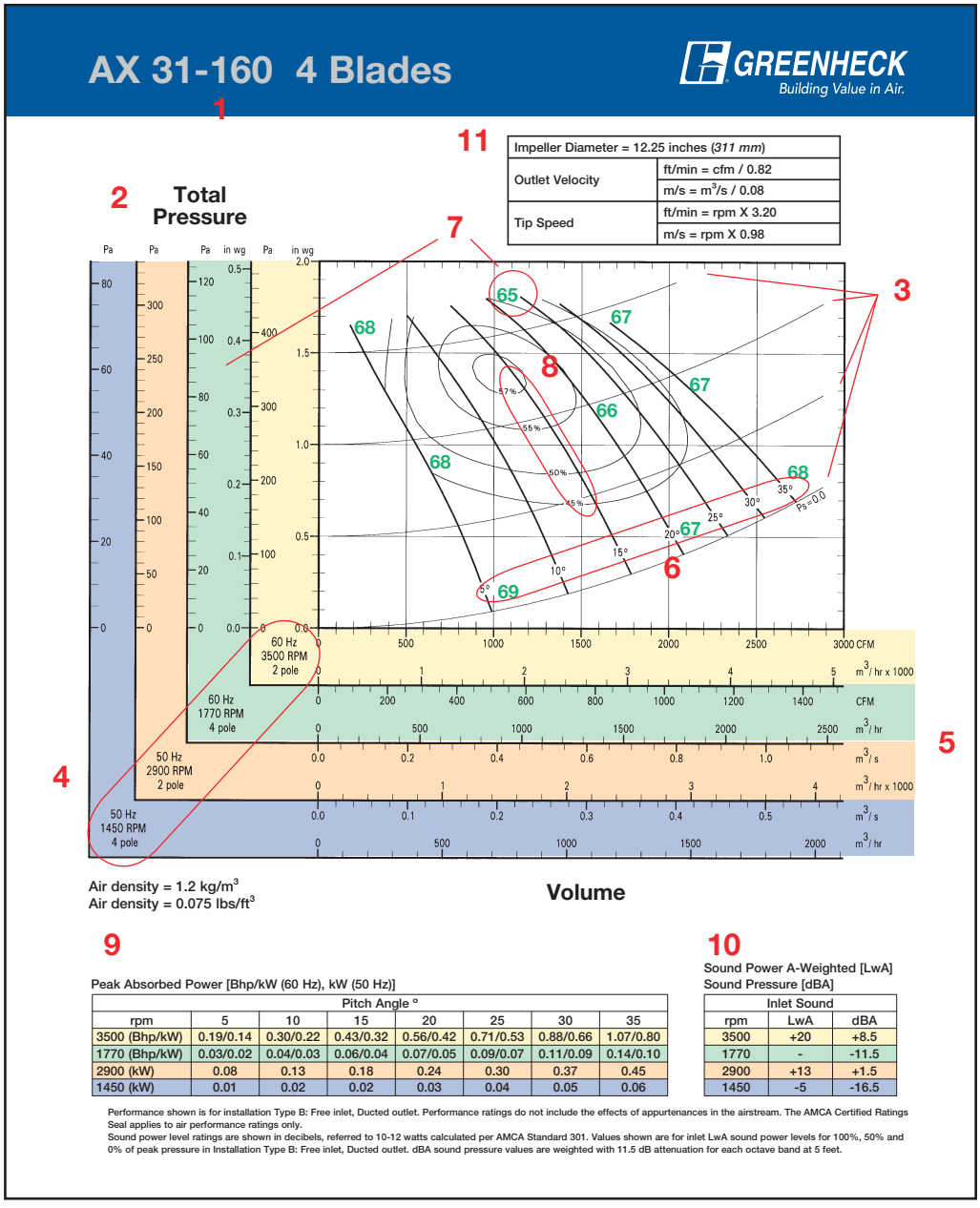
The choice of five different hub diameters, along with variations in blade quantities, ensures that the most economical air performance can be achieved. In addition, during the design process, close attention was paid to the “hub to tip” ratios. This is a comparison of the hub diameter to the “tip to tip” dimension of the blades. Different choices of hub to tip ratios further optimize fan performance and provide a cost effective solution by not over sizing a hub to produce required volumes and pressures.

The hubs are constructed from cast aluminum and use a taper lock bushing to secure the hub to the motor shaft.

Available Hub Sizes (mm) / Number of Blades					
Size	160	190	275	400	533
	(4 or 6)	(4 or 6)	(6 or 9)	(6 or 9)	(8 or 12)
31	X				
36	X				
41	X	X			
47	X	X			
54	X	X	X		
63	X	X	X		
72		X	X		
80		X	X	X	
90			X	X	
103			X	X	
113			X	X	X
123				X	X
140				X	X
160				X	X

How to use this performance manual

The performance pages contains information in metric and english units. These are color coded with motor power frequency and motor speed for easy and quick reference in finding air performance, power requirements, and sound information. See back cover for selection example.



Pitch Angle °							
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	0.19/0.14	0.30/0.22	0.43/0.32	0.56/0.42	0.71/0.53	0.88/0.66	1.07/0.80
1770 (Bhp/kW)	0.03/0.02	0.04/0.03	0.06/0.04	0.07/0.05	0.09/0.07	0.11/0.09	0.14/0.10
2900 (kW)	0.08	0.13	0.18	0.24	0.30	0.37	0.45
1450 (kW)	0.01	0.02	0.02	0.03	0.04	0.05	0.06

Inlet Sound		
rpm	LwA	dBA
3500	+20	+8.5
1770	-	-11.5
2900	+13	+1.5
1450	-5	-16.5

Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

1 Model size and hub diameter

2 Total Pressure Axis in Pascals (Pa) and Inches Water Gauge (in. wg)

3 Static Pressure - Lines of constant static pressure

4 Color coded power frequency and motor speed (rpm)/poles

5 Volume - Axis displays two different units of measure for each power frequency and motor speed.

6 Blade pitch - Shown in 5 degree increments, integral pitches are available between the displayed limits.

7 Sound power (LwA) - Color coded sound power level levels are displayed as a percentage of peak power; 100%, 50% and 0%. Use corrections in the sound power table to find corresponding LwA and dBA levels for a specific power frequency and motor speed.

8 Total Efficiency curves - Curves show total efficiency levels at different performance points. Those curves do not reflect static efficiency levels.

9 Peak Absorbed Power table - Table displays the maximum power required by pitch angle and motor rpm. Values provided are in brake horse power and kilowatts.

10 Sound Power and Sound Pressure table - Table displays the corrections required by motor rpm.

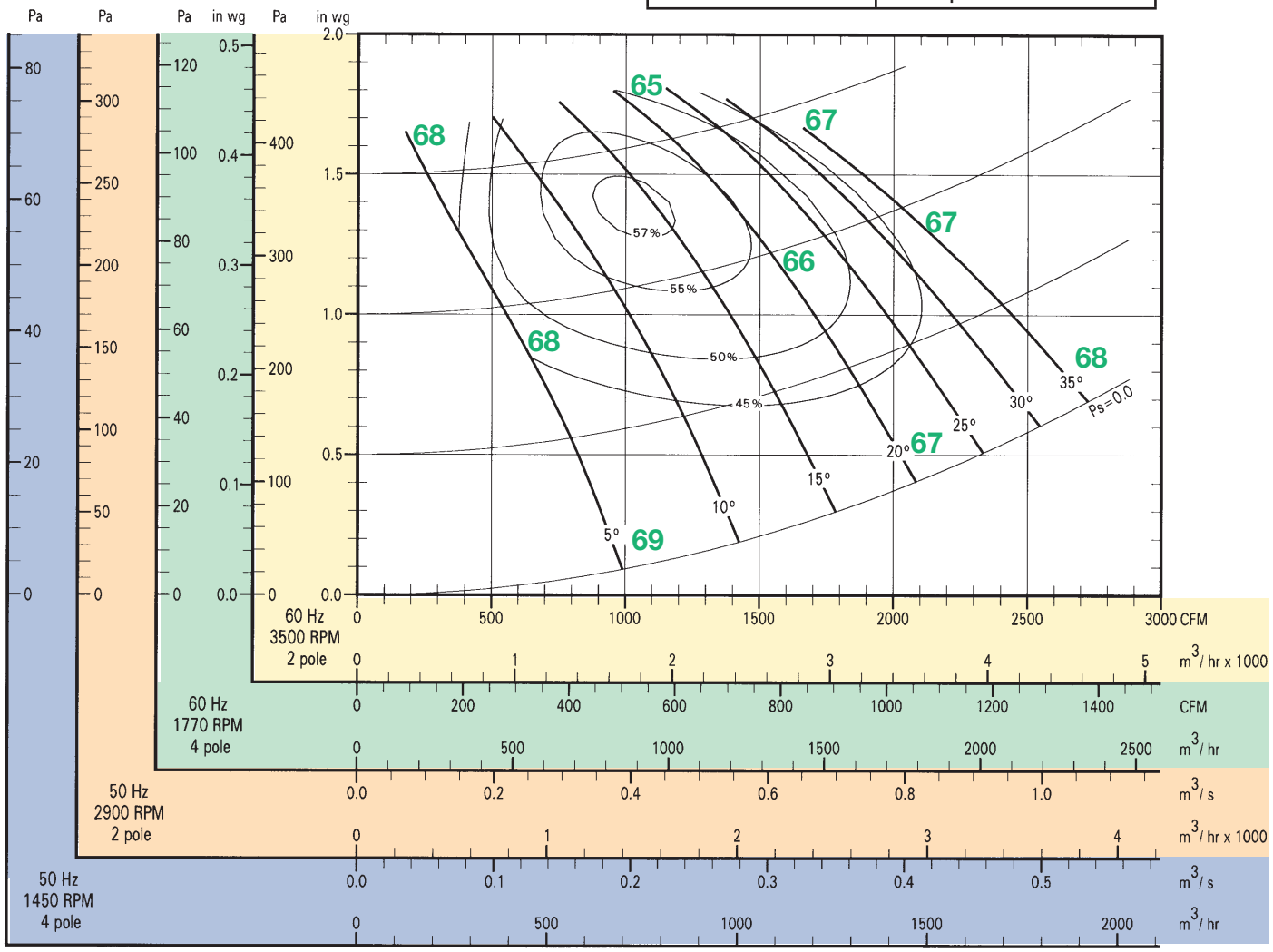
11 Outlet Velocity and Tip Speed formulas - For deriving outlet velocity, use either cfm or m^3/s in the appropriate Outlet Velocity equation. Tip speed equation is only dependent on motor rpm.

AX 31-160 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 12.25 inches *(311 mm)*	
Outlet Velocity	ft/min = cfm / 0.82
	$m/s = m^3/s / 0.08$
Tip Speed	ft/min = rpm X 3.20
	m/s = rpm X 0.98

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	0.19/0.14	0.30/0.22	0.43/0.32	0.56/0.42	0.71/0.53	0.88/0.66	1.07/0.80
1770 (Bhp/kW)	0.03/0.02	0.04/0.03	0.06/0.04	0.07/0.05	0.09/0.07	0.11/0.09	0.14/0.10
2900 (kW)	0.08	0.13	0.18	0.24	0.30	0.37	0.45
1450 (kW)	0.01	0.02	0.02	0.03	0.04	0.05	0.06

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+20	+8.5
1770	-	-11.5
2900	+13	+1.5
1450	-5	-16.5

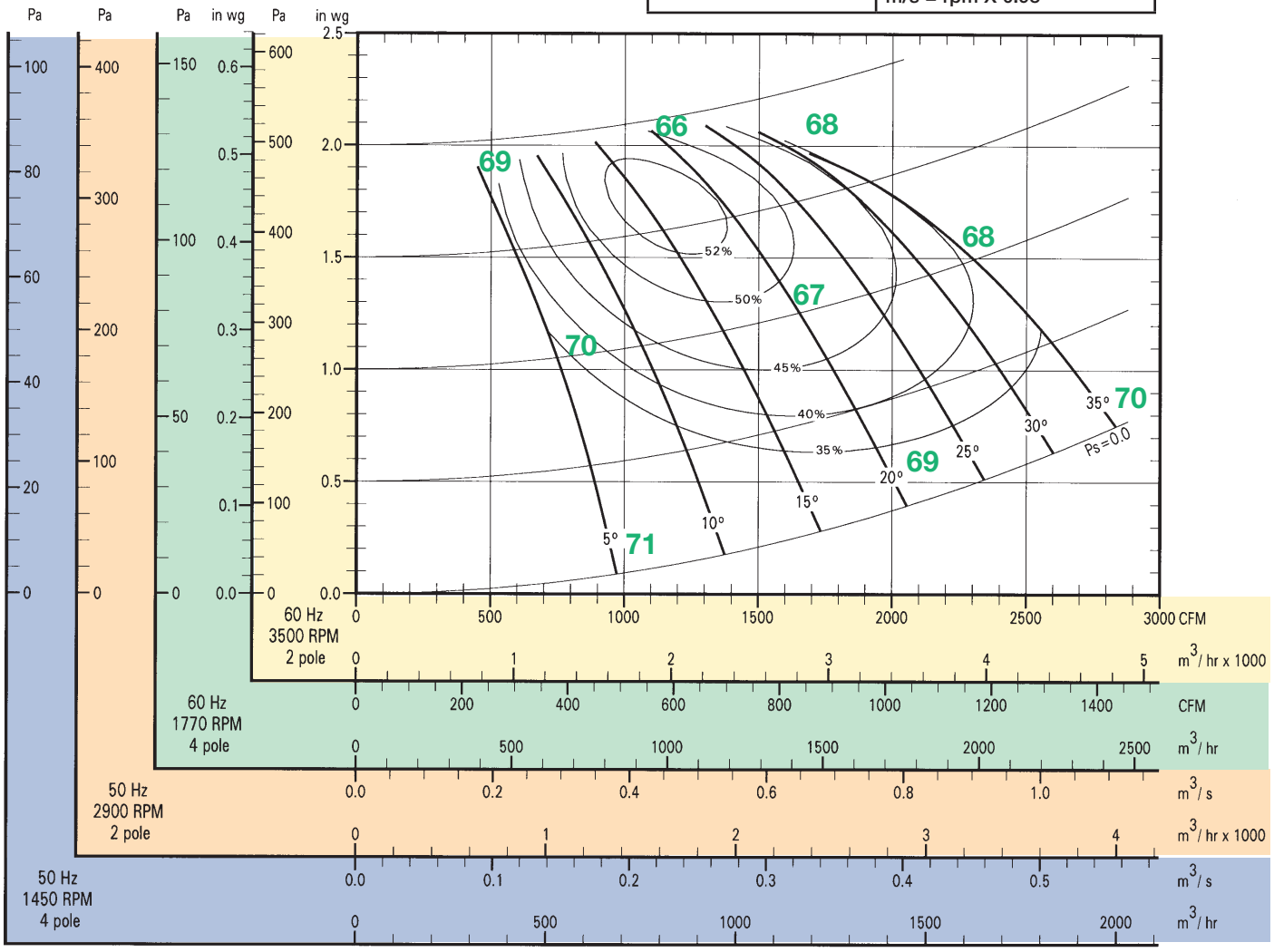
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 31-160 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 12.25 inches *(311 mm)*	
Outlet Velocity	ft/min = cfm / 0.82
	m/s = m^3/s / 0.08
Tip Speed	ft/min = rpm X 3.20
	m/s = rpm X 0.98

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	0.38/0.28	0.43/0.32	0.56/0.42	0.73/0.54	0.93/0.69	1.16/0.87	1.41/1.06
1770 (Bhp/kW)	0.05/0.04	0.06/0.04	0.07/0.05	0.09/0.07	0.12/0.09	0.15/0.11	0.18/0.11
2900 (kW)	0.16	0.18	0.24	0.31	0.39	0.49	0.60
1450 (kW)	0.02	0.02	0.03	0.04	0.05	0.06	0.08

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+20	+8.5
1770	-	-11.5
2900	+14	+2.5
1450	-5	-16.5

Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
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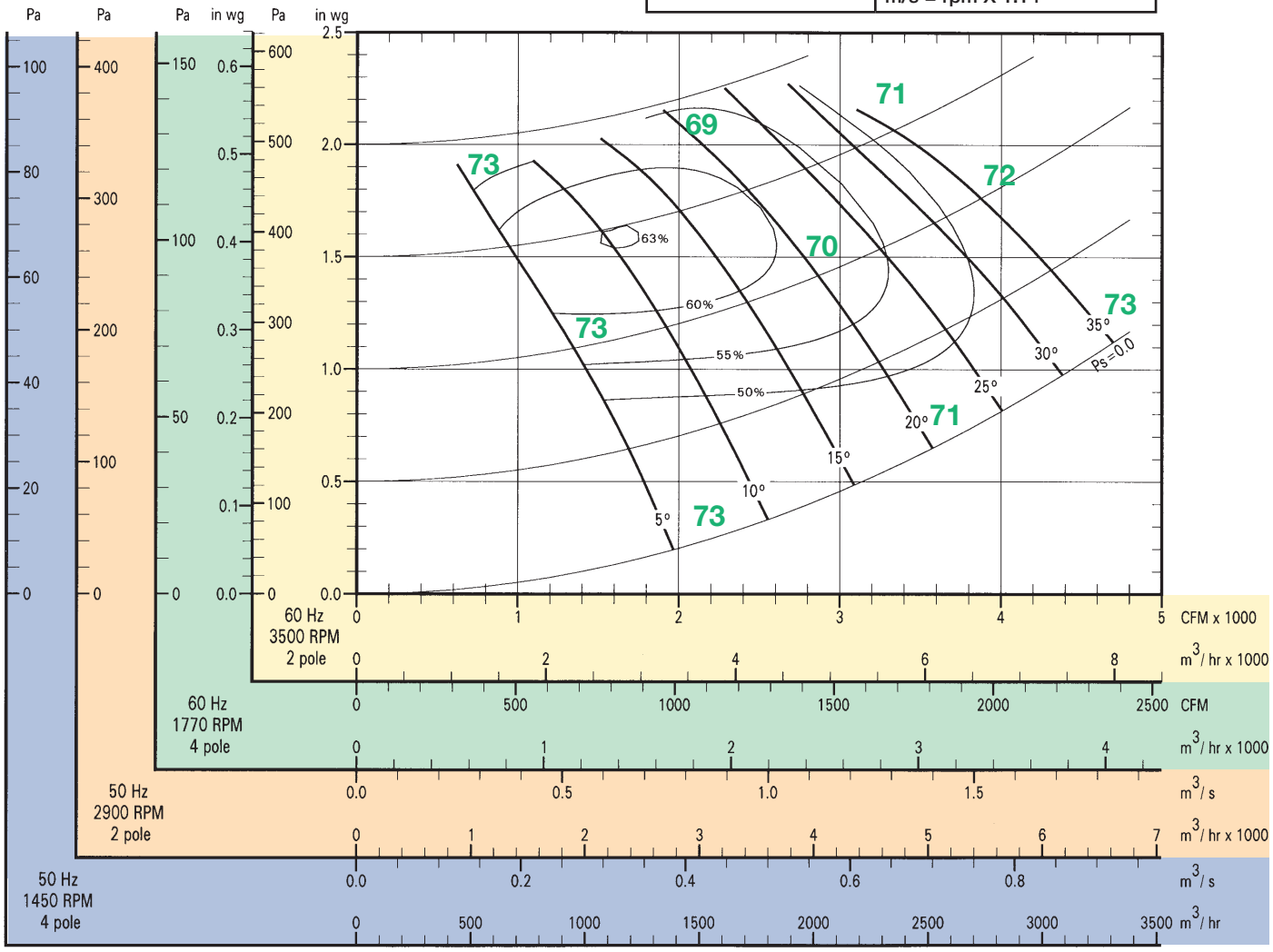
AX 36-160 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 14.25 inches *(362 mm)*	
Outlet Velocity	ft/min = cfm / 1.11
	m/s = m^3/s / 0.10
Tip Speed	ft/min = rpm X 3.73
	m/s = rpm X 1.14

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	0.42/0.31	0.61/0.46	0.87/0.65	1.18/0.88	1.52/1.13	1.89/1.41	2.31/1.72
1770 (Bhp/kW)	0.05/0.04	0.08/0.06	0.11/0.08	0.15/0.11	0.20/0.15	0.24/0.18	0.30/0.22
2900 (kW)	0.18	0.26	0.37	0.50	0.64	0.80	0.98
1450 (kW)	0.02	0.03	0.05	0.06	0.08	0.10	0.12

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+19	+7.5
1770	-	-11.5
2900	+13	+1.5
1450	-5	-16.5

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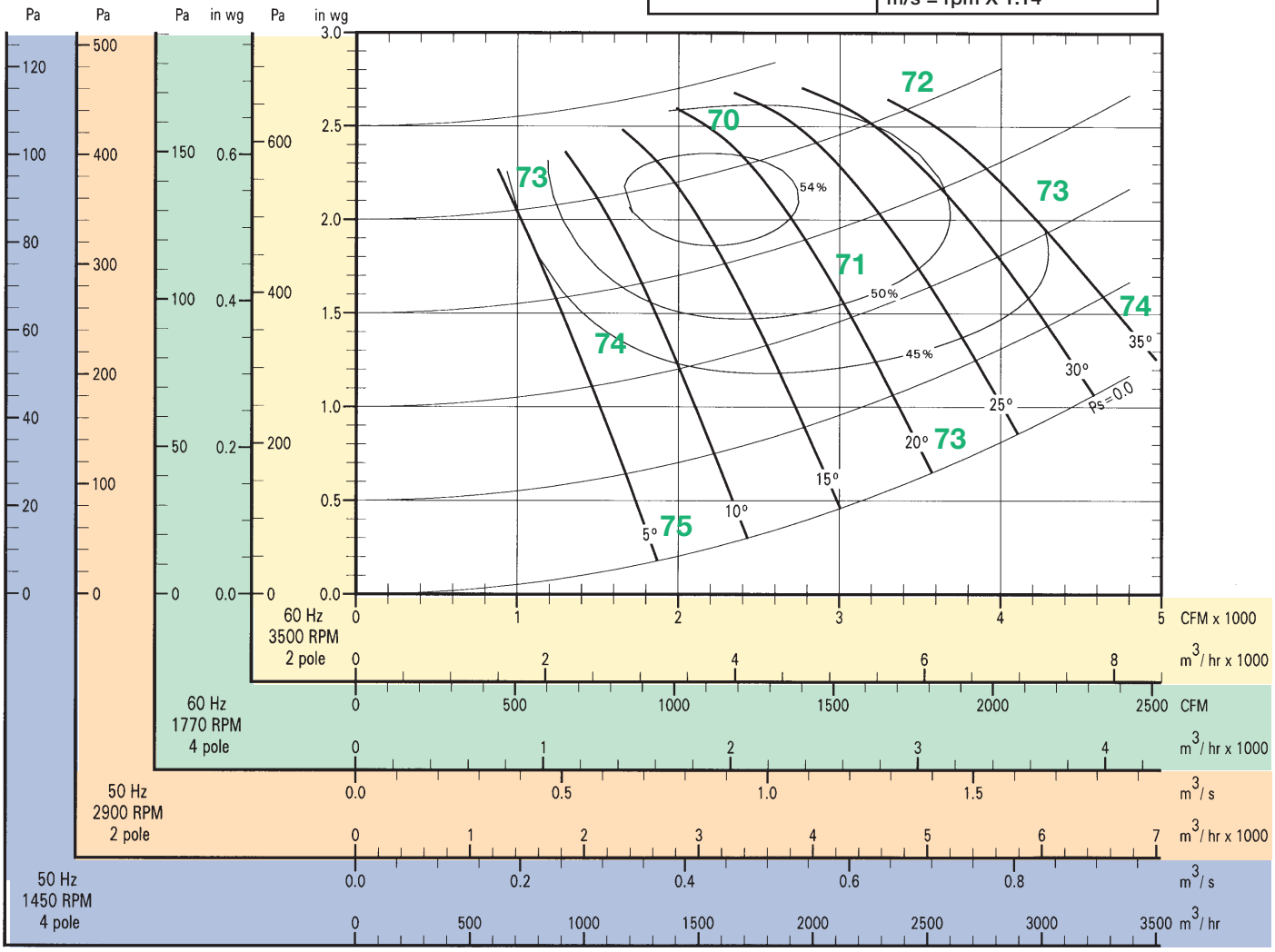
AX 36-160 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 14.25 inches *(362 mm)*	
Outlet Velocity	ft/min = cfm / 1.11
	m/s = m^3/s / 0.10
Tip Speed	ft/min = rpm X 3.73
	m/s = rpm X 1.14

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	0.72/0.54	0.94/0.70	1.25/0.93	1.64/1.22	2.07/1.55	2.54/1.89	3.00/2.24
1770 (Bhp/kW)	0.09/0.07	0.12/0.09	0.16/0.12	0.21/0.16	0.27/0.20	0.33/0.24	0.39/0.29
2900 (kW)	0.31	0.40	0.53	0.70	0.88	1.08	1.27
1450 (kW)	0.04	0.05	0.07	0.09	0.11	0.13	0.16

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+19	+7.5
1770	-	-11.5
2900	+13	+1.5
1450	-5	-16.5

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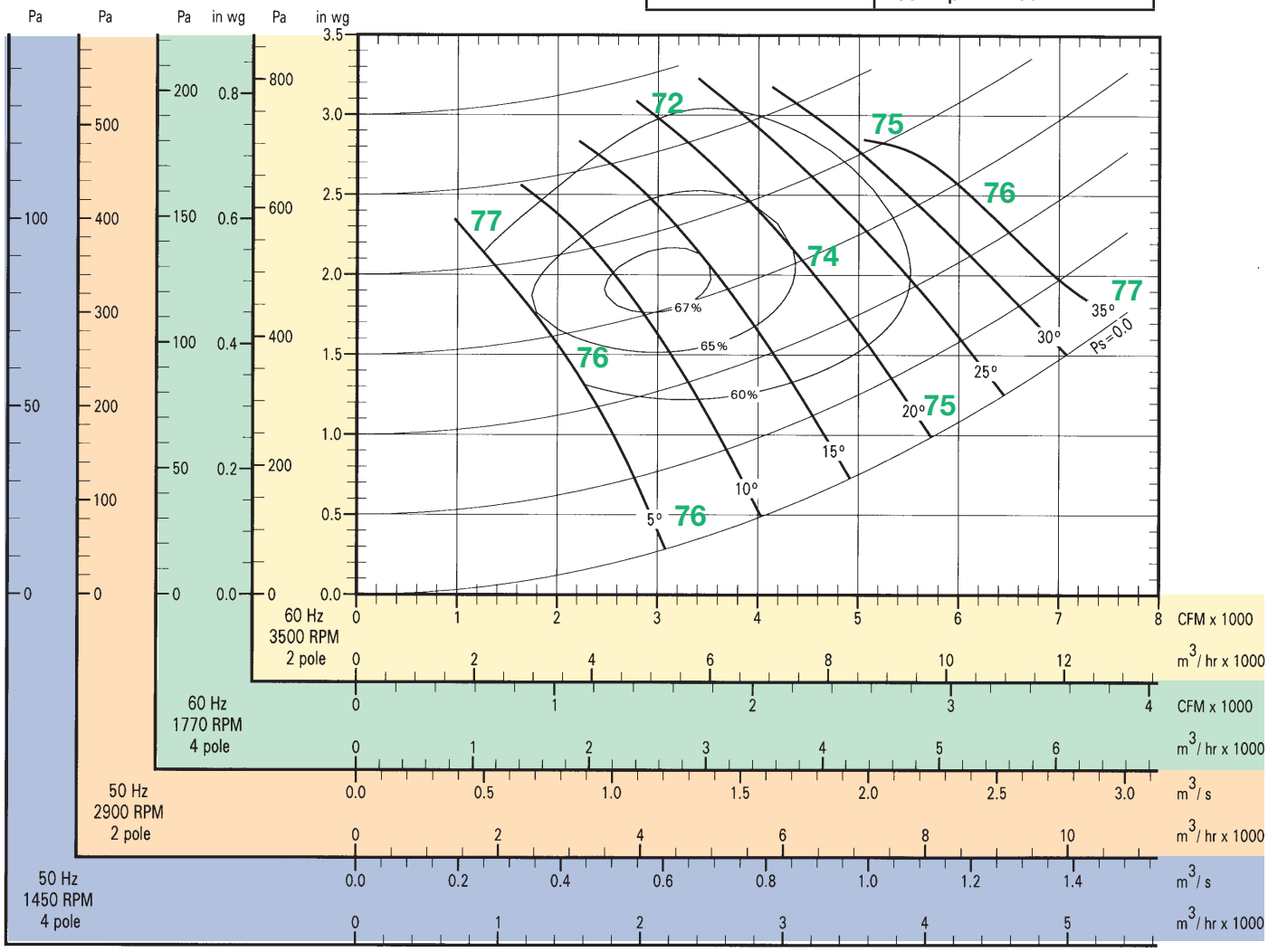
AX 41-160 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 16.25 inches *(413 mm)*	
Outlet Velocity	ft/min = cfm / 1.44
	m/s = m^3/s / 0.13
Tip Speed	ft/min = rpm X 4.25
	m/s = rpm X 1.30

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	0.78/0.58	1.21/0.90	1.76/1.31	2.36/1.76	3.02/2.25	3.73/2.78	4.52/3.37
1770 (Bhp/kW)	0.10/0.08	0.16/0.12	0.23/0.17	0.31/0.23	0.39/0.29	0.48/0.36	0.58/0.44
2900 (kW)	0.33	0.51	0.74	1.00	1.28	1.58	1.92
1450 (kW)	0.04	0.06	0.09	0.13	0.16	0.20	0.24

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+18	+6.5
1770	-	-11.5
2900	+12	+0.5
1450	-6	-17.5

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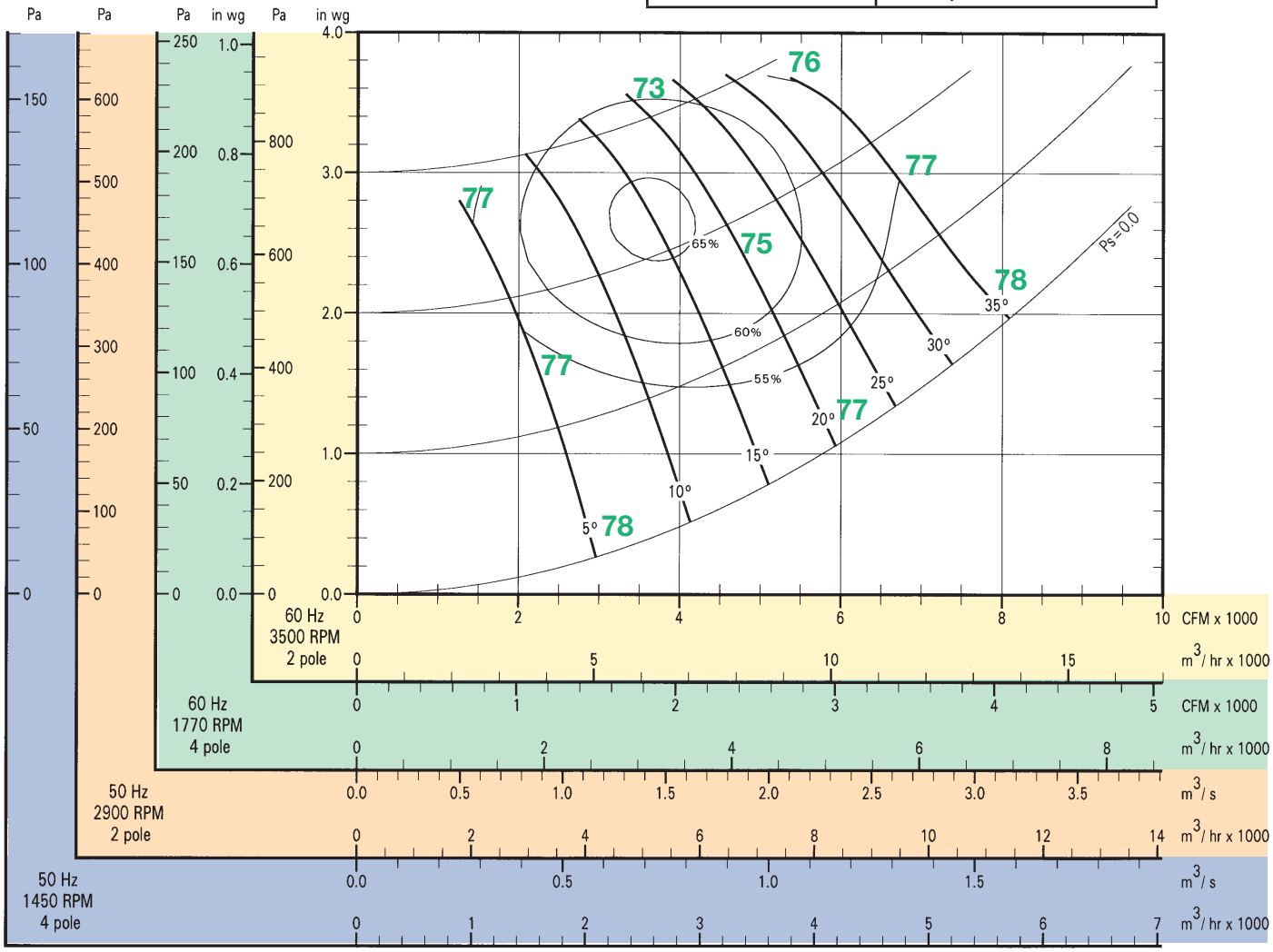
AX 41-160 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 16.25 inches *(413 mm)*	
Outlet Velocity	ft/min = cfm / 1.44
	m/s = m^3/s / 0.13
Tip Speed	ft/min = rpm X 4.25
	m/s = rpm X 1.30

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	1.11/0.82	1.76/1.32	2.44/1.82	3.15/2.35	3.90/2.91	4.76/3.55	5.76/4.30
1770 (Bhp/kW)	0.14/0.11	0.23/0.17	0.32/0.24	0.41/0.30	0.51/0.38	0.62/0.46	0.75/0.56
2900 (kW)	0.47	0.75	1.04	1.34	1.66	2.02	2.44
1450 (kW)	0.06	0.09	0.13	0.17	0.21	0.25	0.31

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+16	+4.5
1770	-	-11.5
2900	+12	+0.5
1450	-7	-18.5

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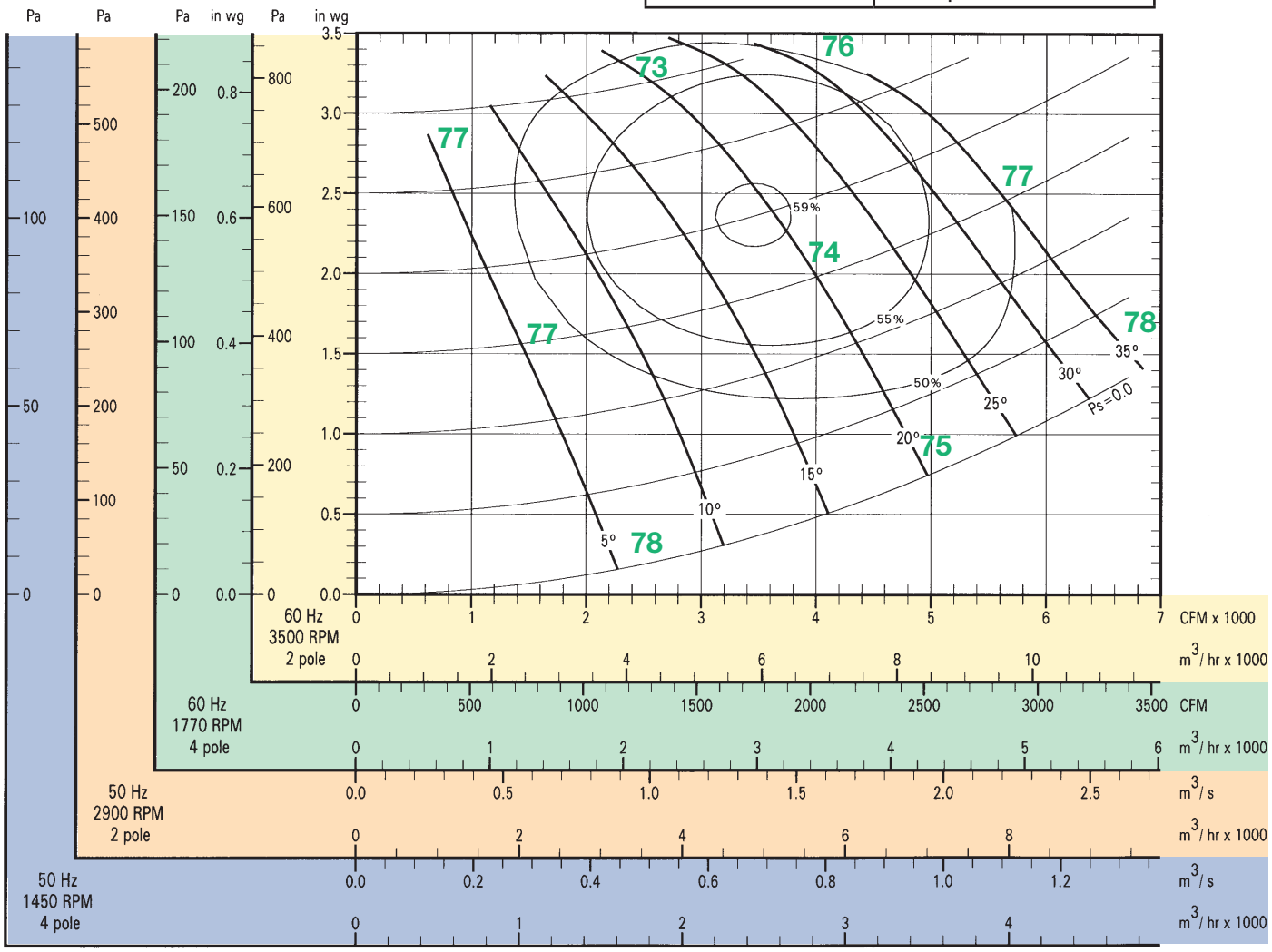
AX 41-190 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 16.25 inches *(413 mm)*	
Outlet Velocity	ft/min = cfm / 1.44
	m/s = m^3/s / 0.13
Tip Speed	ft/min = rpm X 4.25
	m/s = rpm X 1.30

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	0.80/0.60	1.24/0.92	1.79/1.34	2.43/1.81	3.11/2.32	3.81/2.84	4.55/3.40
1770 (Bhp/kW)	0.10/0.08	0.16/0.12	0.23/0.17	0.31/0.23	0.40/0.30	0.49/0.37	0.59/0.44
2900 (kW)	0.34	0.52	0.76	1.03	1.32	1.62	1.93
1450 (kW)	0.04	0.07	0.10	0.13	0.16	0.20	0.24

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
3500	+19	+7.5
1770	-	-11.5
2900	+13	+1.5
1450	-6	-17.5

Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
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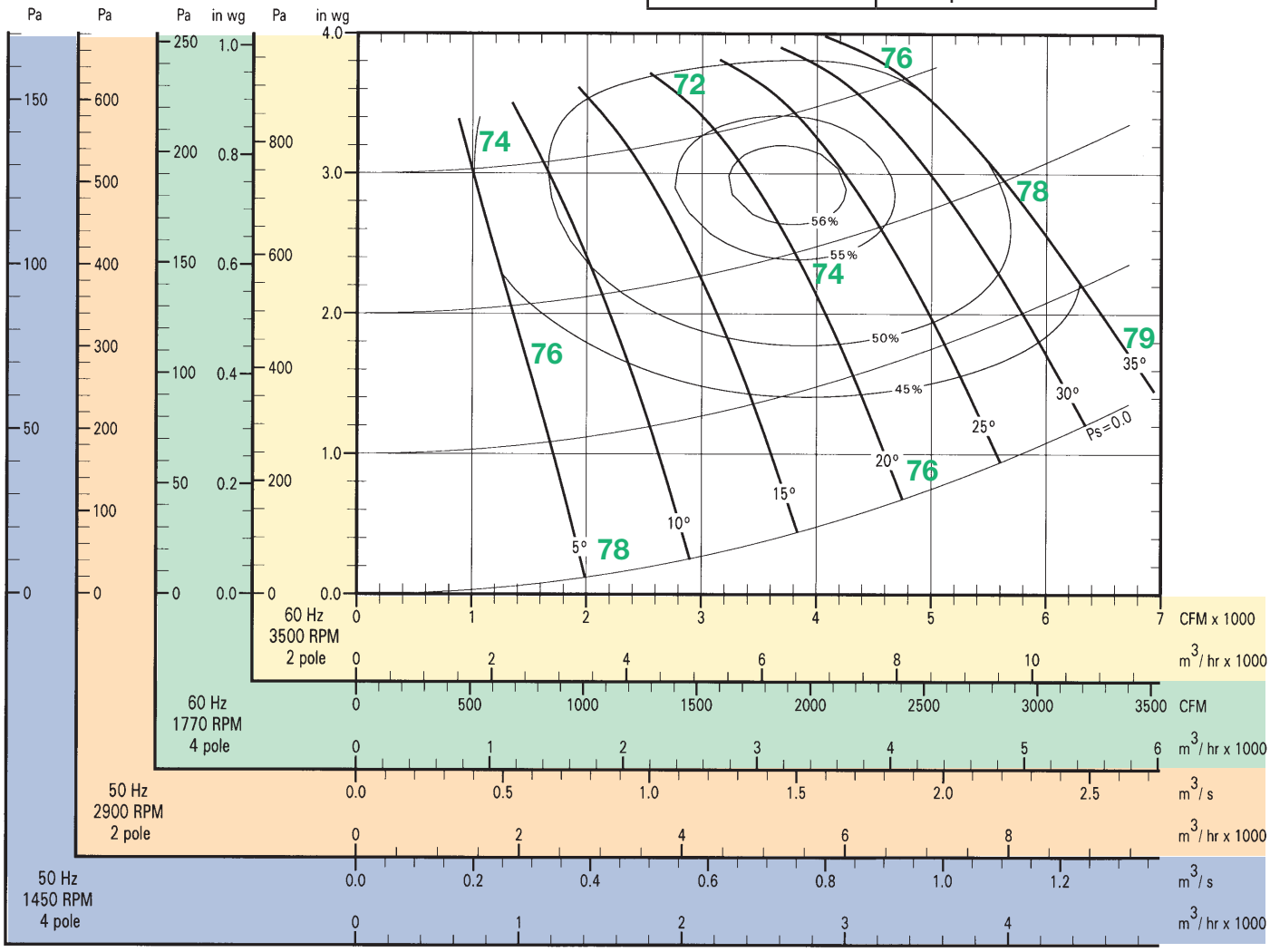
AX 41-190 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 16.25 inches *(413 mm)*	
Outlet Velocity	ft/min = cfm / 1.44
	m/s = m^3/s / 0.13
Tip Speed	ft/min = rpm X 4.25
	m/s = rpm X 1.30

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	1.09/0.81	1.59/1.18	2.23/1.67	3.00/2.24	3.84/2.87	4.71/3.51	5.58/4.16
1770 (Bhp/kW)	0.14/0.11	0.21/0.15	0.29/0.22	0.39/0.29	0.50/0.37	0.61/0.45	0.72/0.54
2900 (kW)	0.46	0.67	0.95	1.27	1.63	2.00	2.37
1450 (kW)	0.06	0.08	0.12	0.16	0.20	0.25	0.30

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+18	+6.5
1770	-	-11.5
2900	+13	+1.5
1450	-6	-17.5

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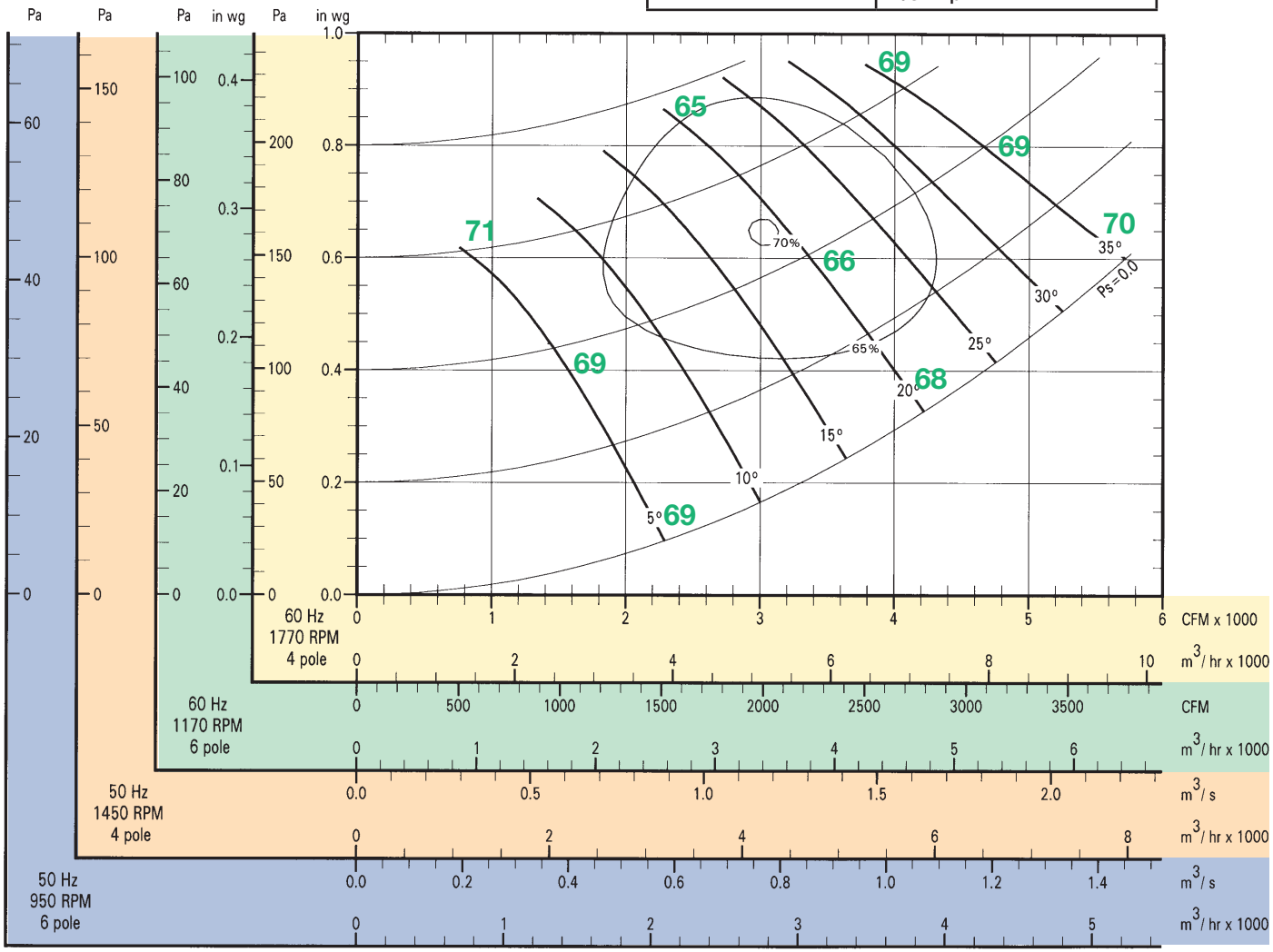
AX 47-160 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 18.38 inches *(467 mm)*	
Outlet Velocity	ft/min = cfm / 1.84
	m/s = m^3/s / 0.17
Tip Speed	ft/min = rpm X 4.81
	m/s = rpm X 1.47

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	0.17/0.12	0.26/0.20	0.37/0.28	0.49/0.36	0.62/0.47	0.79/0.59	1.01/0.75
1170 (Bhp/kW)	0.05/0.04	0.08/0.06	0.11/0.08	0.14/0.11	0.18/0.13	0.23/0.17	0.29/0.22
1450 (kW)	0.07	0.11	0.15	0.20	0.26	0.33	0.41
950 (kW)	0.02	0.03	0.04	0.06	0.07	0.09	0.12

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+6	-5.5
950	-6	-17.5

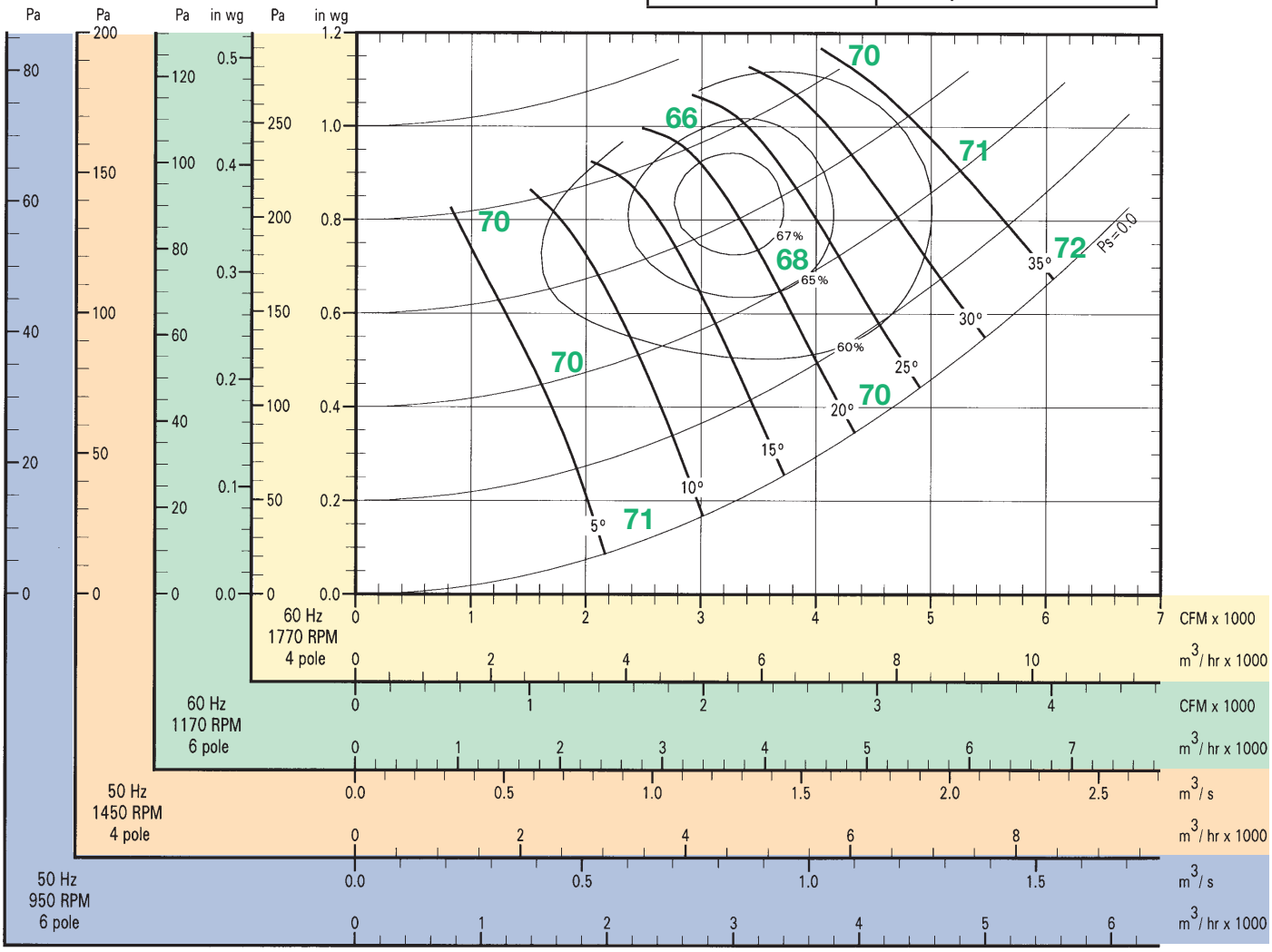
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 47-160 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 18.38 inches *(467 mm)*	
Outlet Velocity	ft/min = cfm / 1.84
	m/s = m^3/s / 0.17
Tip Speed	ft/min = rpm X 4.81
	m/s = rpm X 1.47

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	0.21/0.16	0.37/0.27	0.51/0.38	0.65/0.49	0.82/0.61	1.03/0.77	1.31/0.98
1170 (Bhp/kW)	0.06/0.05	0.11/0.08	0.15/0.11	0.19/0.14	0.24/0.18	0.30/0.22	0.38/0.28
1450 (kW)	0.09	0.15	0.21	0.27	0.34	0.42	0.54
950 (kW)	0.02	0.04	0.06	0.08	0.09	0.12	0.15

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+9	-2.5
1170	-	-11.5
1450	+5	-6.5
950	-6	-17.5

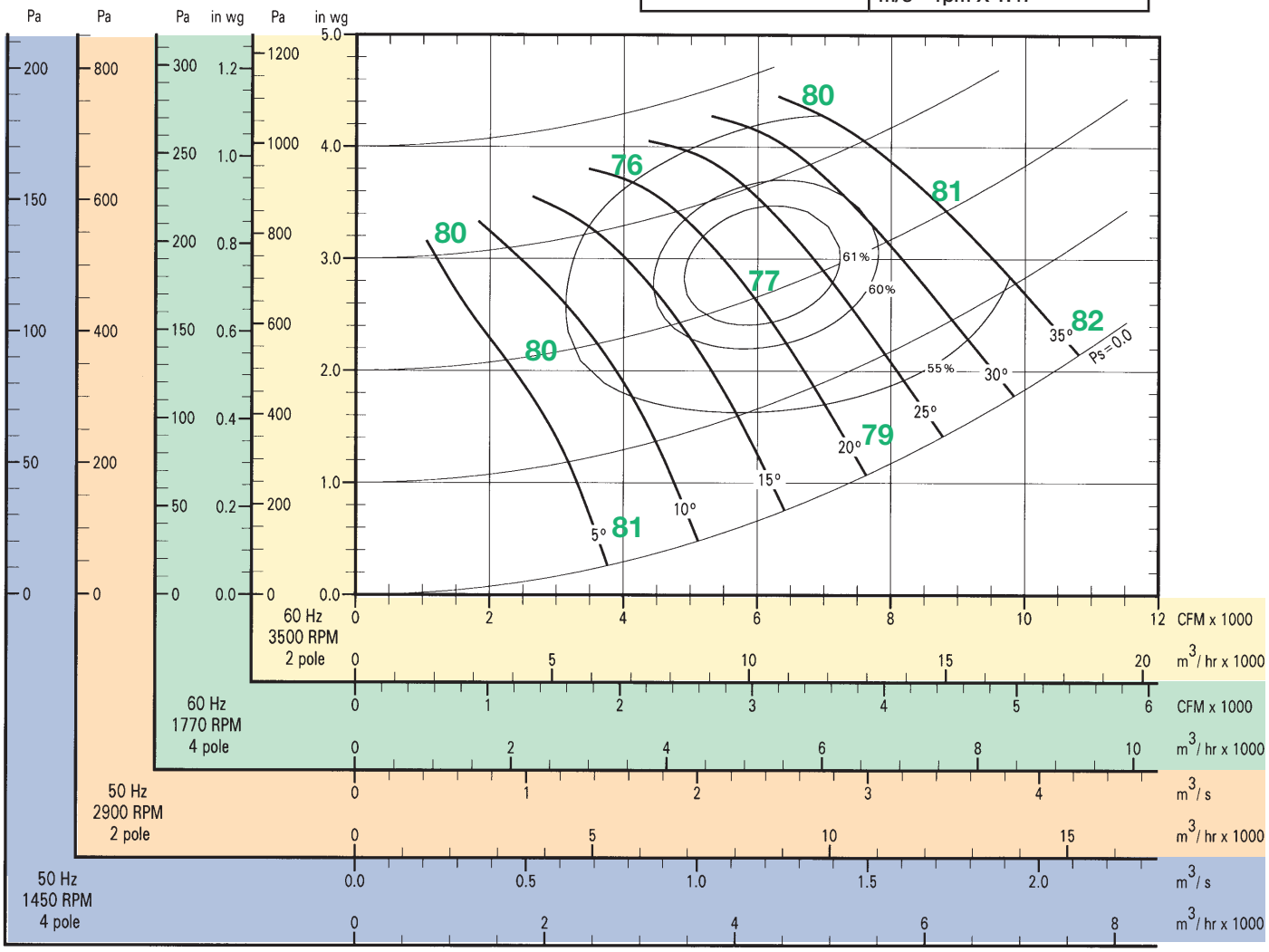
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 47-190 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 18.38 inches *(467 mm)*	
Outlet Velocity	ft/min = cfm / 1.84
	m/s = m^3/s / 0.17
Tip Speed	ft/min = rpm X 4.81
	m/s = rpm X 1.47

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	1.57/1.17	2.32/1.73	3.26/2.43	4.36/3.25	5.61/4.19	7.01/5.23	8.54/6.37
1770 (Bhp/kW)	0.20/0.15	0.30/0.22	0.42/0.31	0.56/0.42	0.73/0.54	0.91/0.68	1.10/0.82
2900 (kW)	0.67	0.98	1.38	1.85	2.38	2.97	3.62
1450 (kW)	0.08	0.12	0.17	0.23	0.30	0.37	0.45

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+19	+7.5
1770	-	-11.5
2900	+13	+1.5
1450	-7	-18.5

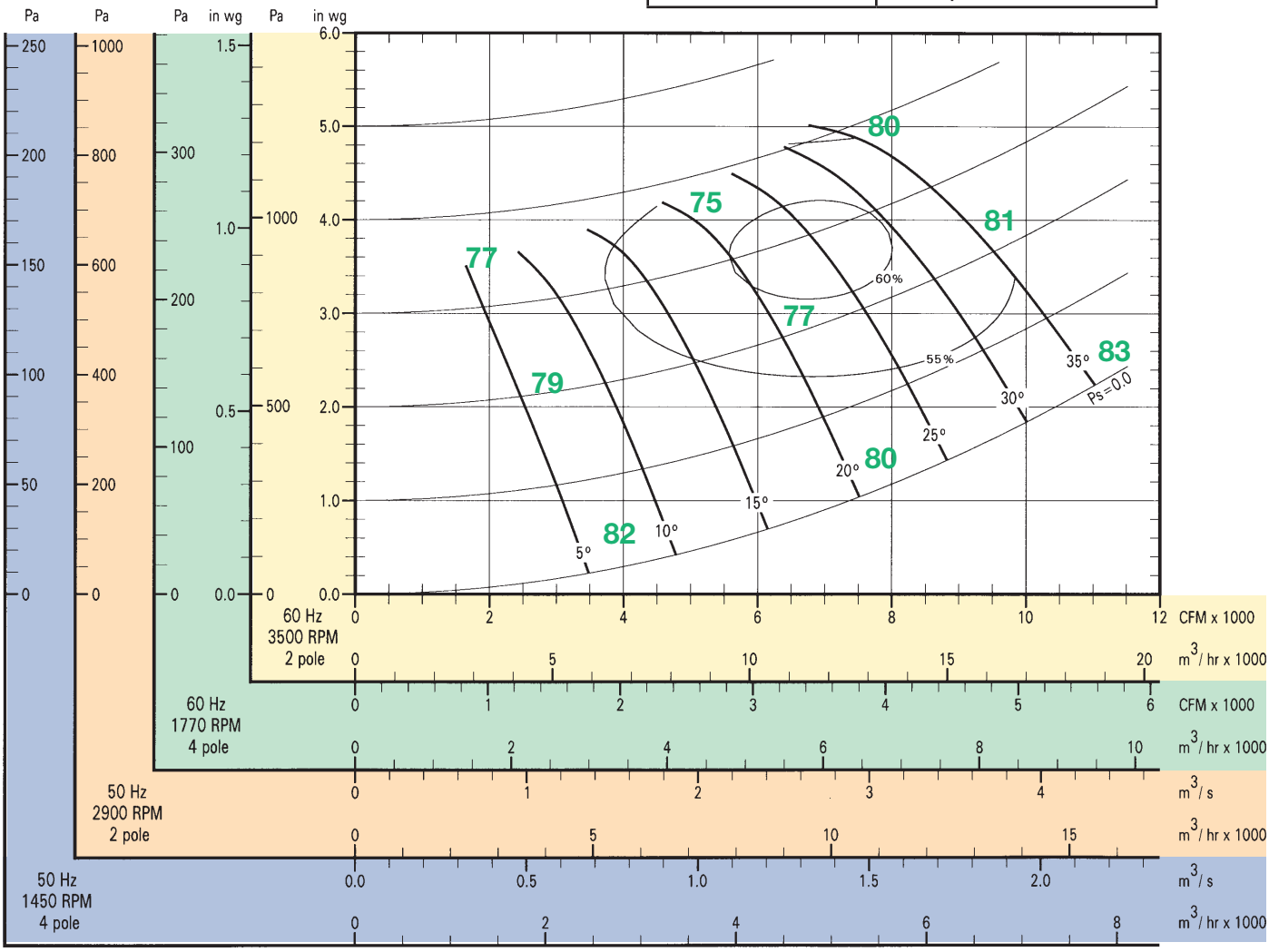
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 47-190 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 18.38 inches *(467 mm)*	
Outlet Velocity	ft/min = cfm / 1.84
	m/s = m^3/s / 0.17
Tip Speed	ft/min = rpm X 4.81
	m/s = rpm X 1.47

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	2.04/1.52	2.94/2.19	4.11/3.06	5.48/4.09	7.04/5.25	8.71/6.49	10.4/7.78
1770 (Bhp/kW)	0.26/0.20	0.38/0.28	0.53/0.40	0.71/0.53	0.91/0.68	1.13/0.84	1.35/1.01
2900 (kW)	0.87	1.25	1.74	2.33	2.99	369	4.43
1450 (kW)	0.11	0.16	0.22	0.29	0.37	0.46	0.55

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+19	+7.5
1770	-	-11.5
2900	+13	+1.5
1450	-5	-16.5

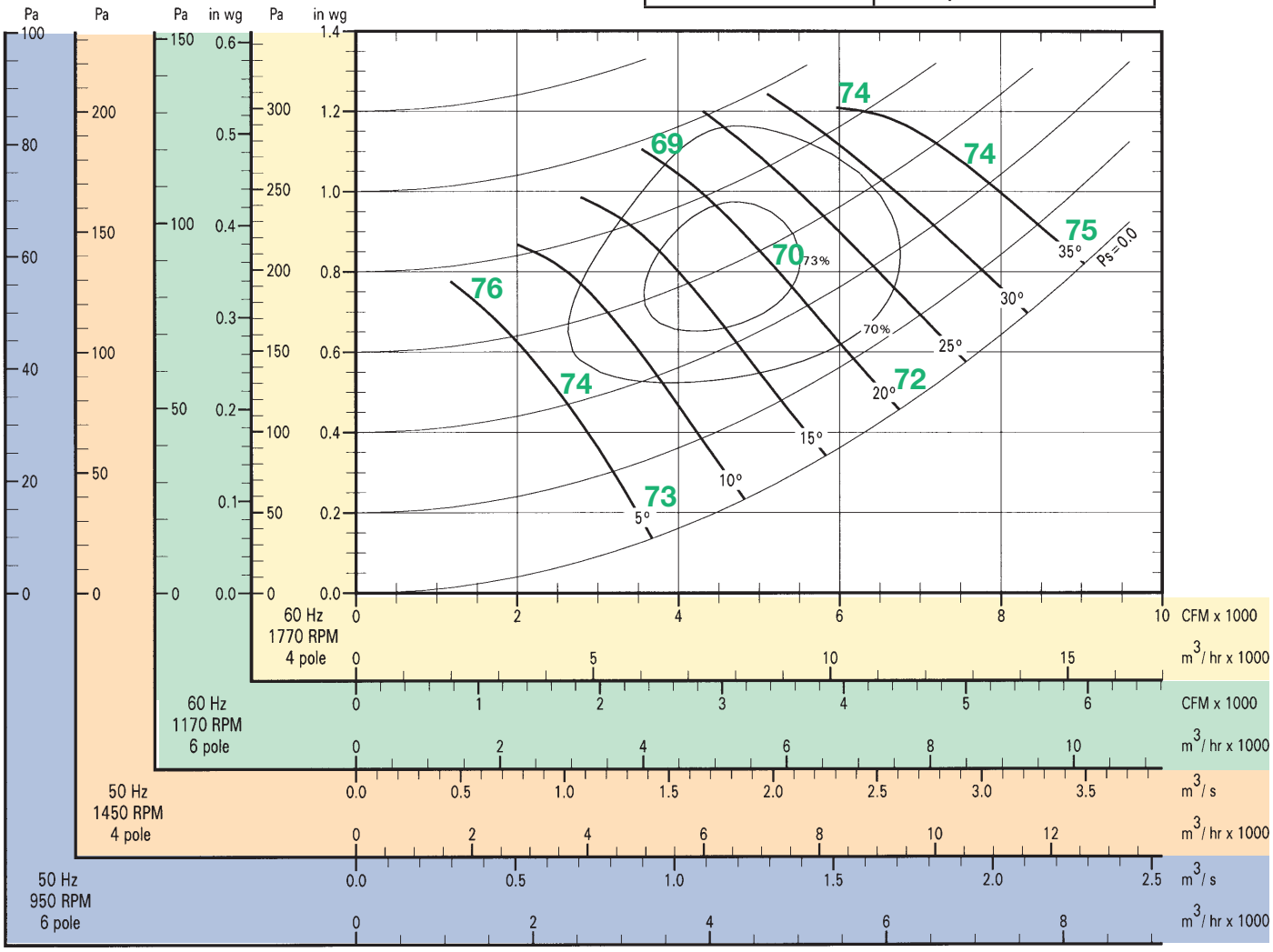
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 54-160 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 21.38 inches *(543 mm)*	
Outlet Velocity	ft/min = cfm / 2.49
	m/s = m^3/s / 0.23
Tip Speed	ft/min = rpm X 5.60
	m/s = rpm X 1.71

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	0.29/0.22	0.48/0.36	0.69/0.52	0.93/0.69	1.20/0.90	1.52/1.13	1.92/1.43
1170 (Bhp/kW)	0.08/0.06	0.14/0.10	0.20/0.15	0.27/0.20	0.35/0.26	0.44/0.33	0.55/0.41
1450 (kW)	0.12	0.20	0.28	0.38	0.49	0.62	0.79
950 (kW)	0.03	0.06	0.08	0.11	0.14	0.18	0.22

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+12	+0.5
1170	-	-11.5
1450	+6	-5.5
950	-5	-16.5

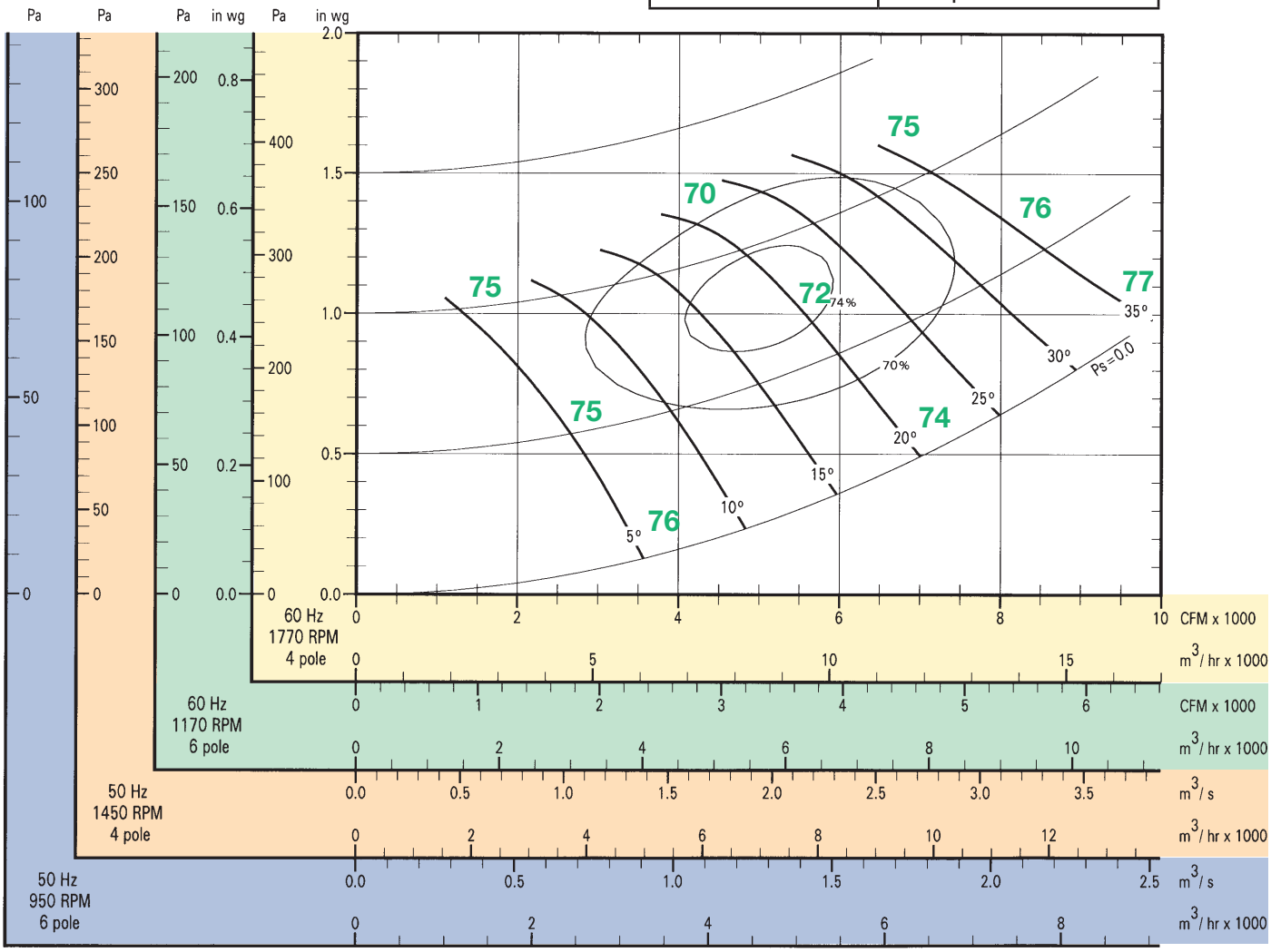
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 54-160 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 21.38 inches *(543 mm)*	
Outlet Velocity	ft/min = cfm / 2.49
	m/s = m^3/s / 0.23
Tip Speed	ft/min = rpm X 5.60
	m/s = rpm X 1.71

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	0.40/0.30	0.64/0.48	0.93/0.69	1.25/0.94	1.62/1.21	2.04/1.52	2.52/1.88
1170 (Bhp/kW)	0.11/0.09	0.19/0.14	0.27/0.20	0.36/0.27	0.47/0.35	0.59/0.44	0.73/0.54
1450 (kW)	0.16	0.26	0.38	0.51	0.67	0.84	1.03
950 (kW)	0.05	0.07	0.11	0.14	0.19	0.24	0.29

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+12	+0.5
1170	-	-11.5
1450	+7	-4.5
950	-6	-17.5

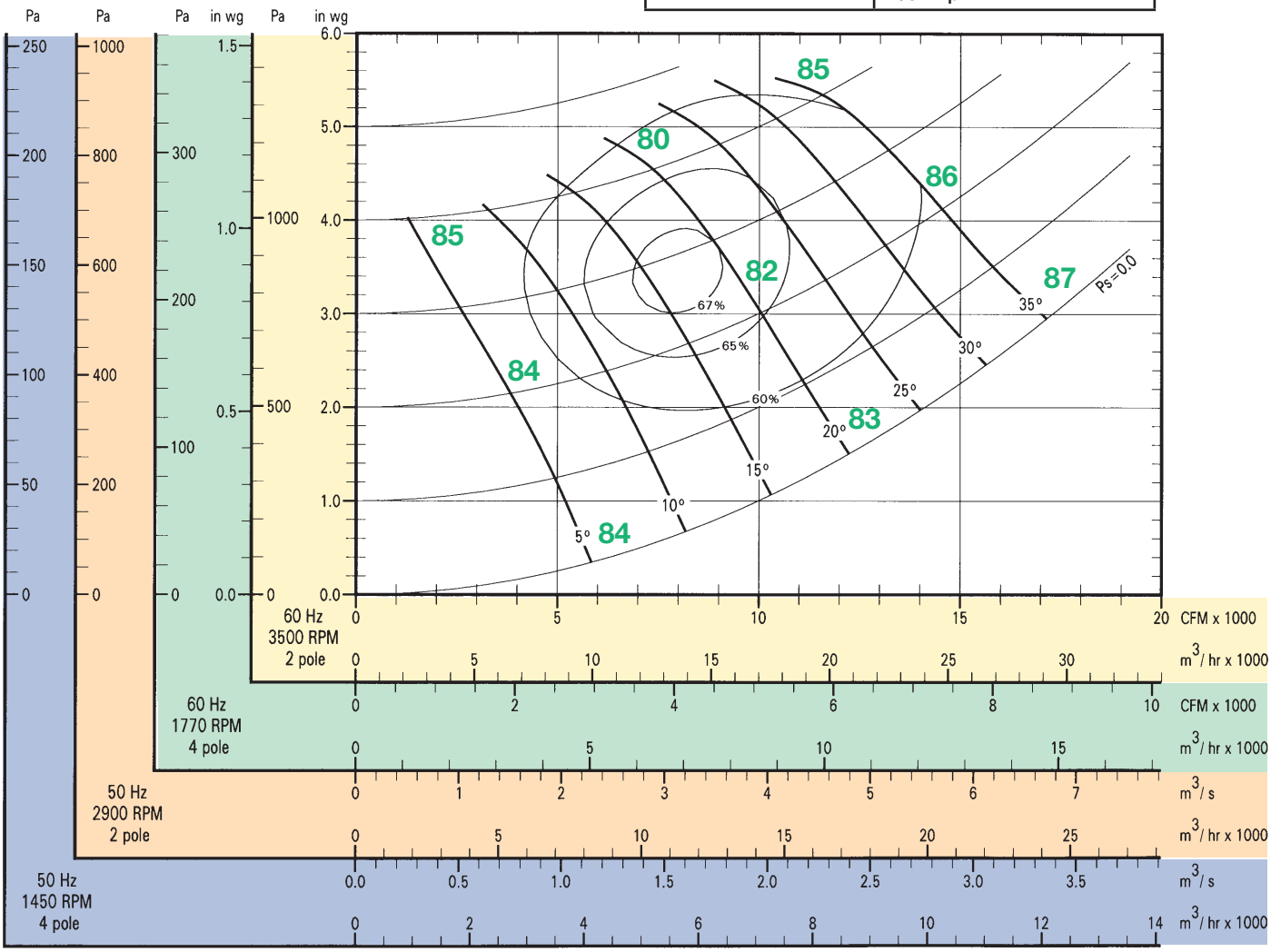
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 54-190 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 21.38 inches *(543 mm)*	
Outlet Velocity	ft/min = cfm / 2.49
	m/s = m^3/s / 0.23
Tip Speed	ft/min = rpm X 5.60
	m/s = rpm X 1.71

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	2.57/1.91	4.08/3.05	6.01/4.48	8.23/6.14	10.7/7.99	13.5/10.1	16.5/12.3
1770 (Bhp/kW)	0.33/0.25	0.53/0.39	0.78/0.58	1.06/0.79	1.39/1.03	1.74/1.30	2.14/1.59
2900 (kW)	1.09	1.73	2.55	3.49	4.55	5.72	7.01
1450 (kW)	0.14	0.22	0.32	0.44	0.57	0.72	0.88

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+18	+6.5
1770	-	-11.5
2900	+13	+1.5
1450	-6	-17.5

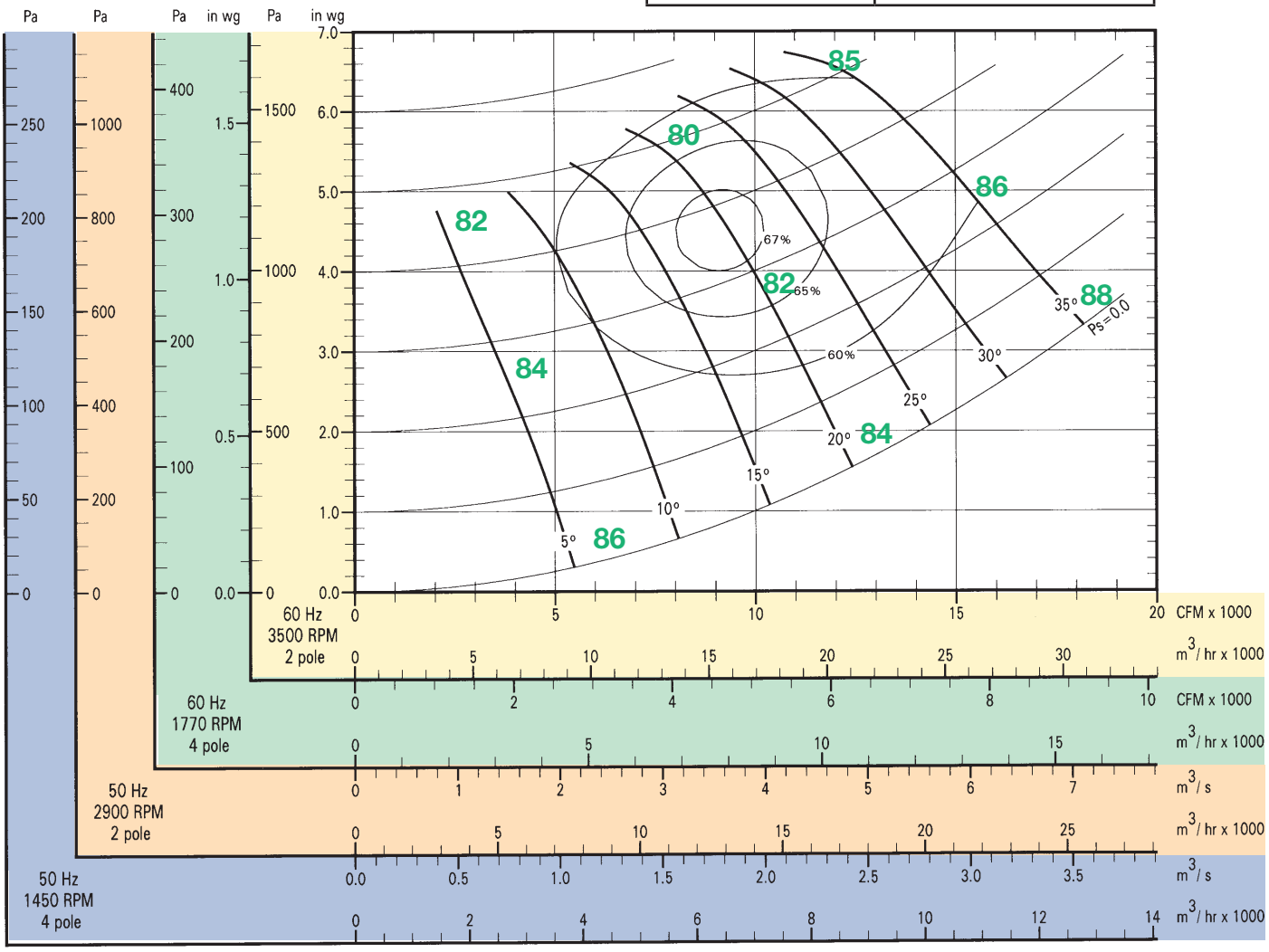
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 54-190 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 21.38 inches *(543 mm)*	
Outlet Velocity	ft/min = cfm / 2.49
	m/s = m^3/s / 0.23
Tip Speed	ft/min = rpm X 5.60
	m/s = rpm X 1.71

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	3.38/2.52	5.66/4.22	8.03/5.99	10.6/7.93	13.6/10.1	17.0/12.7	21.1/15.7
1770 (Bhp/kW)	0.44/0.33	0.73/0.55	1.04/0.78	1.37/1.03	1.75/1.31	2.20/1.64	2.73/2.03
2900 (kW)	1.43	2.40	3.41	4.51	5.75	7.20	8.94
1450 (kW)	0.18	0.30	0.43	0.56	0.72	0.90	1.12

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
3500	+18	+6.5
1770	-	-11.5
2900	+13	+1.5
1450	-5	-16.5

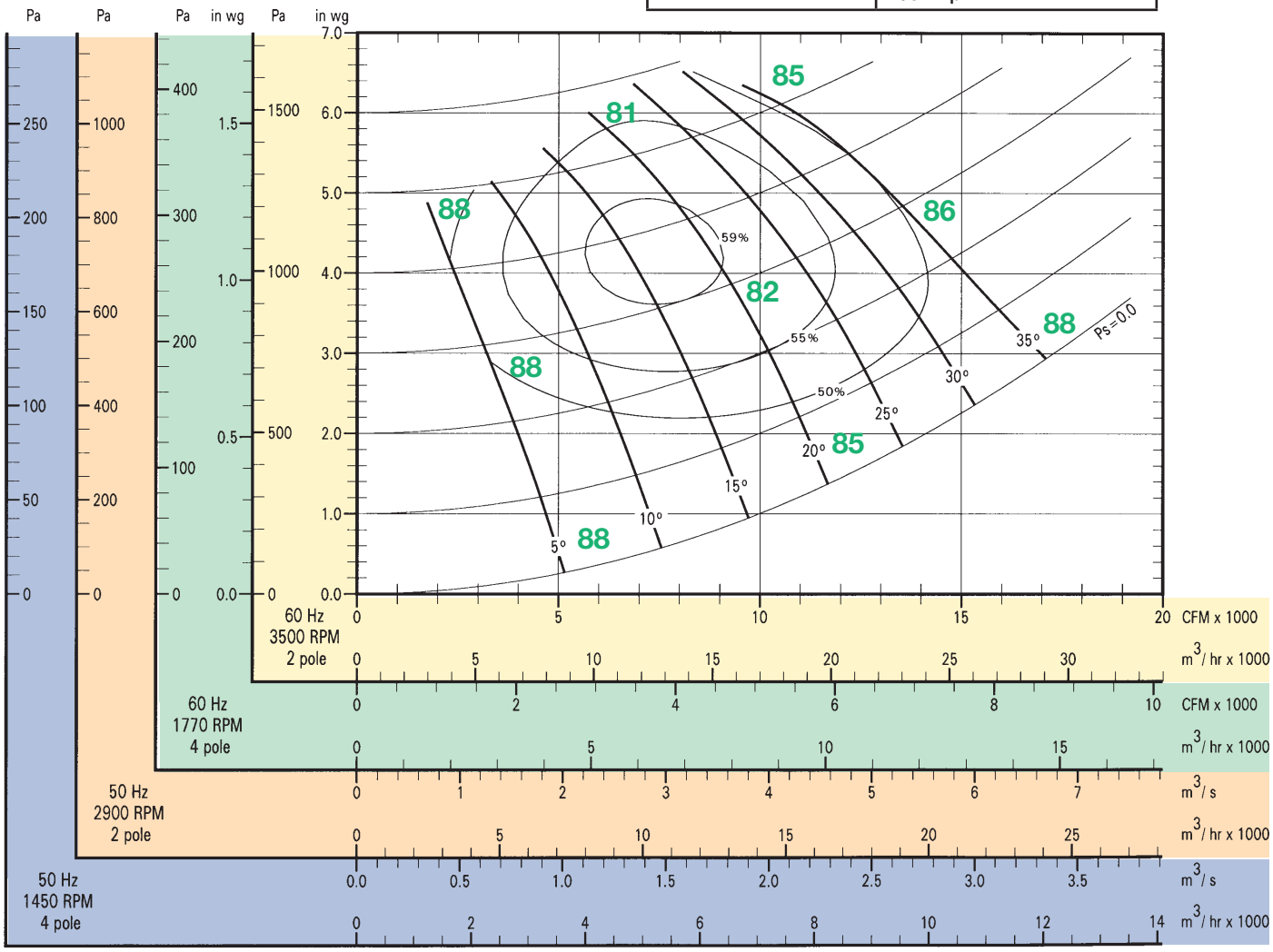
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 54-275 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 21.38 inches *(543 mm)*	
Outlet Velocity	ft/min = cfm / 2.49
	m/s = m^3/s / 0.23
Tip Speed	ft/min = rpm X 5.60
	m/s = rpm X 1.71

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	3.02/2.26	5.30/3.96	7.73/5.77	10.4/7.75	13.4/10.0	16.9/12.6	21.0/15.7
1770 (Bhp/kW)	0.39/0.29	0.69/0.51	1.00/0.75	1.34/1.00	1.74/1.29	2.19/1.63	2.72/2.03
2900 (kW)	1.28	2.25	3.28	4.41	5.69	7.18	8.92
1450 (kW)	0.16	0.28	0.41	0.55	0.71	0.90	1.12

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+18	+6.5
1770	-	-11.5
2900	+13	+1.5
1450	-5	-16.5

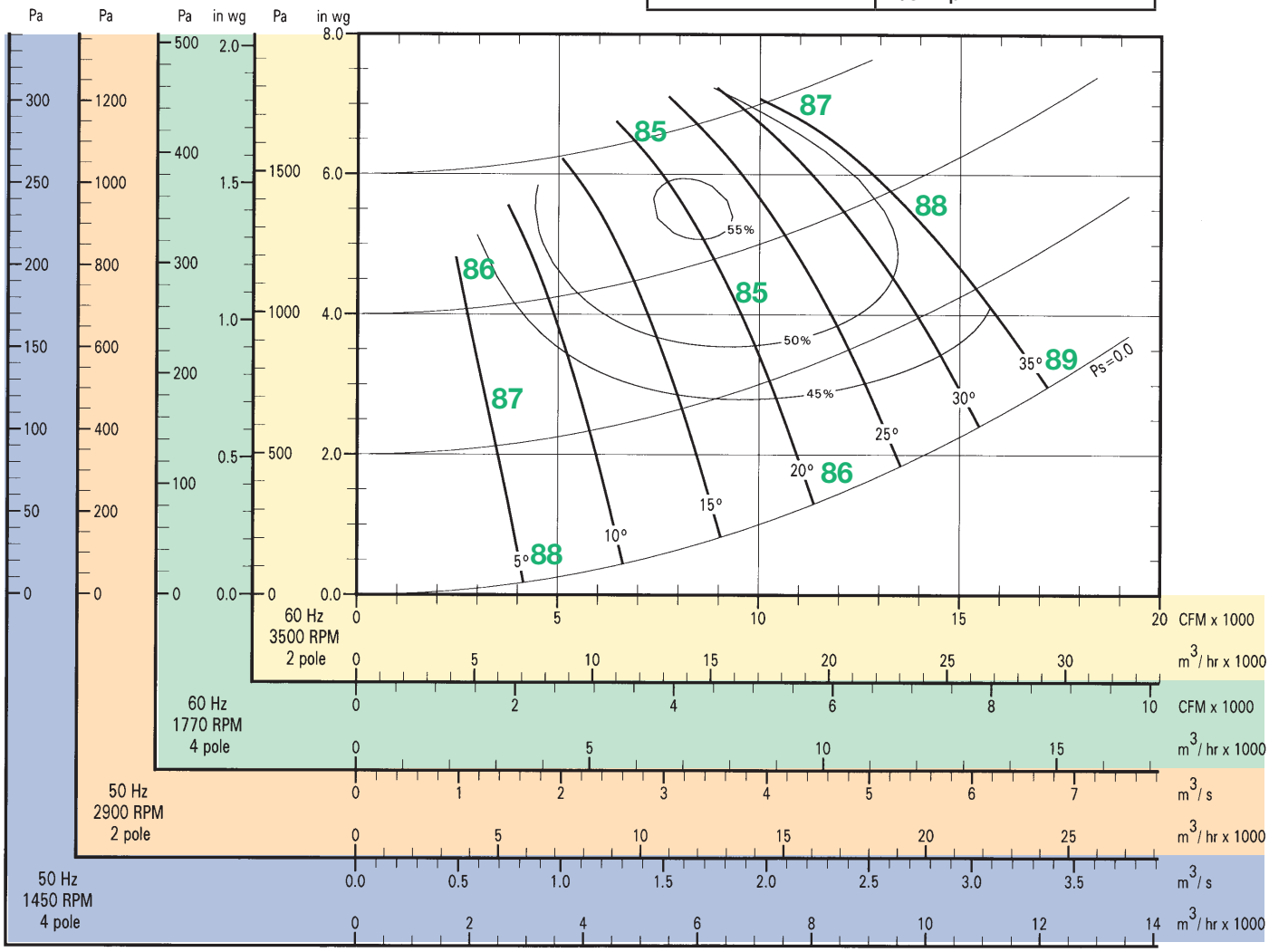
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 54-275 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 21.38 inches *(543 mm)*	
Outlet Velocity	ft/min = cfm / 2.49
	m^3/s = m^3/s / 0.23
Tip Speed	ft/min = rpm X 5.60
	m/s = rpm X 1.71

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	4.41/3.29	6.82/5.09	9.78/7.30	13.1/9.81	16.8/12.5	20.7/15.5	24.8/18.5
1770 (Bhp/kW)	0.57/0.43	0.88/0.66	1.27/0.94	1.70/1.27	2.17/1.62	2.68/2.00	3.21/2.39
2900 (kW)	1.87	2.89	4.15	5.58	7.13	8.80	10.5
1450 (kW)	0.23	0.36	0.52	0.70	0.89	1.10	1.32

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
3500	+17	+5.5
1770	-	-11.5
2900	+12	+0.5
1450	-5	-16.5

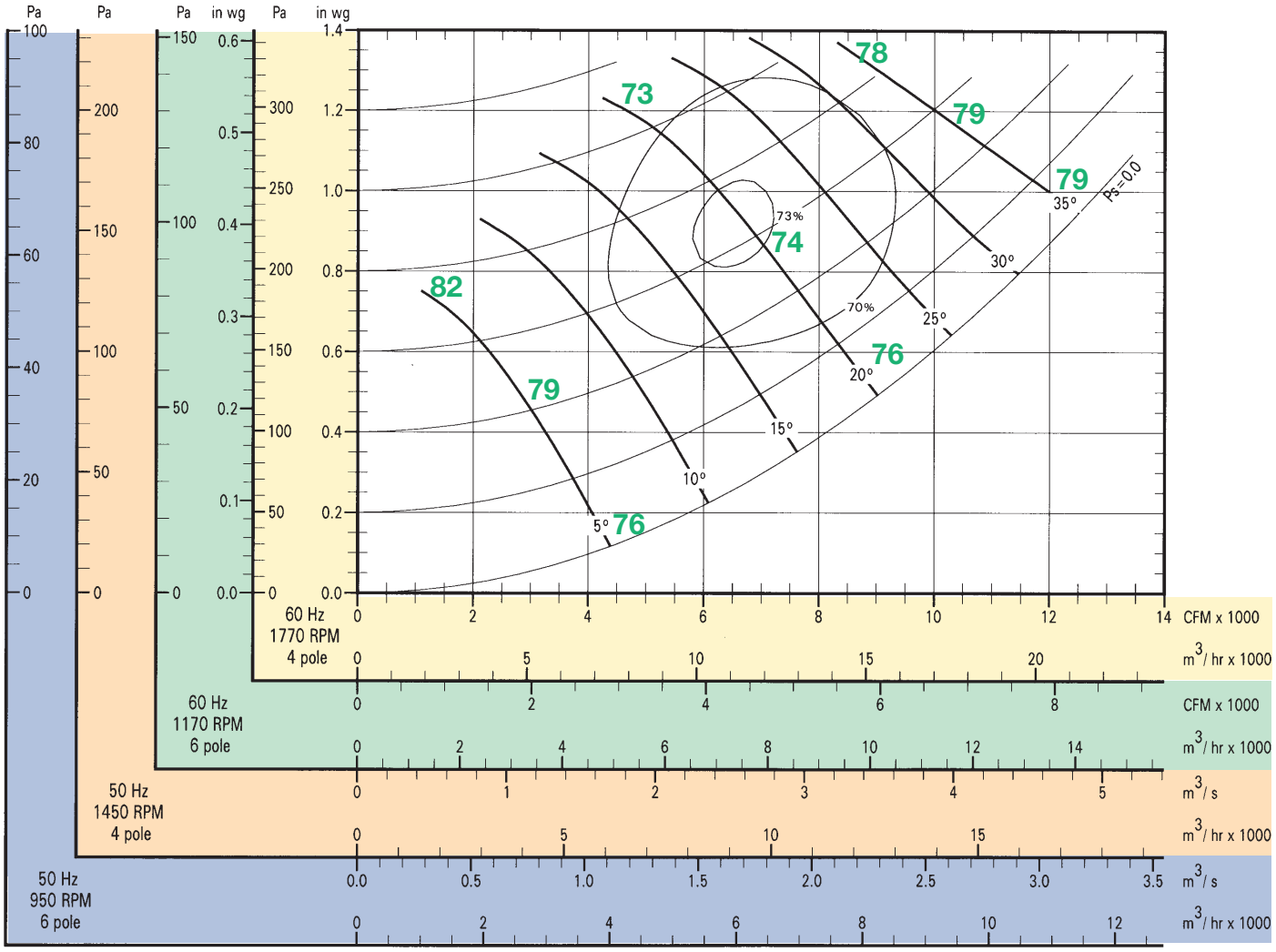
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 63-160 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 24.38 inches *(619 mm)*	
Outlet Velocity	ft/min = cfm / 3.24
	m/s = m^3/s / 0.30
Tip Speed	ft/min = rpm X 6.38
	m/s = rpm X 1.95

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	0.38/0.28	0.64/0.48	0.97/0.72	1.35/1.01	1.79/1.34	2.28/1.70	2.86/2.14
1170 (Bhp/kW)	0.11/0.08	0.19/0.14	0.28/0.21	0.39/0.29	0.52/0.39	0.66/0.49	0.83/0.62
1450 (kW)	0.16	0.26	0.40	0.55	0.74	0.94	1.17
950 (kW)	0.04	0.07	0.11	0.16	0.21	0.26	0.33

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+12	+0.5
1170	-	-11.5
1450	+5	-5.5
950	-6	-17.5

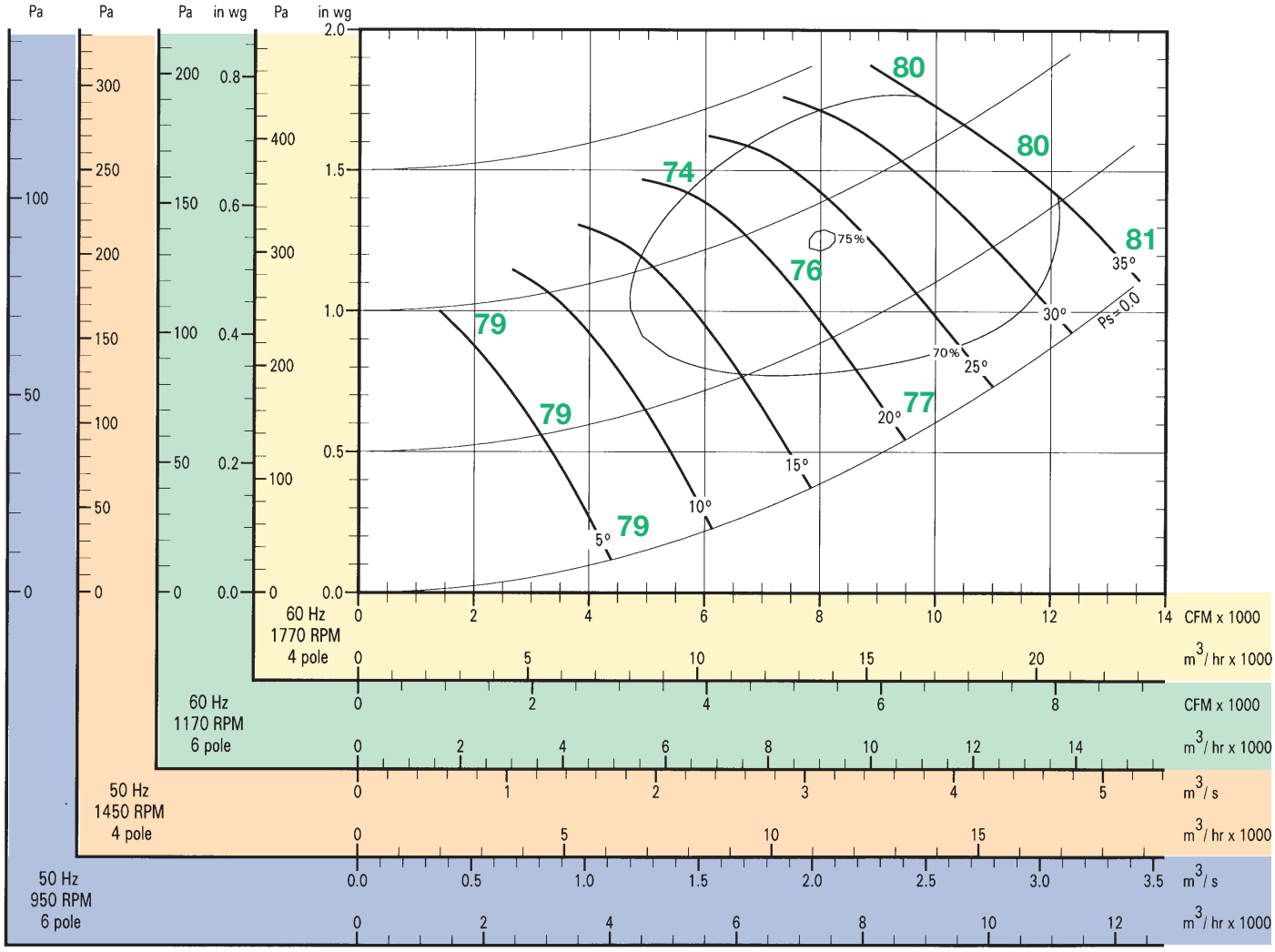
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 63-160 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 24.38 inches *(619 mm)*	
Outlet Velocity	ft/min = cfm / 3.24
	m/s = m^3/s / 0.30
Tip Speed	ft/min = rpm X 6.38
	m/s = rpm X 1.95

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	0.51/0.38	0.86/0.65	1.31/0.98	1.82/1.36	2.41/1.80	3.09/2.31	3.88/2.89
1170 (Bhp/kW)	0.15/0.11	0.25/0.19	0.38/0.28	0.53/0.39	0.70/0.52	0.89/0.67	1.12/0.84
1450 (kW)	0.21	0.35	0.54	0.75	0.99	1.27	1.59
950 (kW)	0.06	0.10	0.15	0.21	0.28	0.36	0.45

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+10	-1.5
1170	-	-11.5
1450	+5	-6.5
950	-6	-17.5

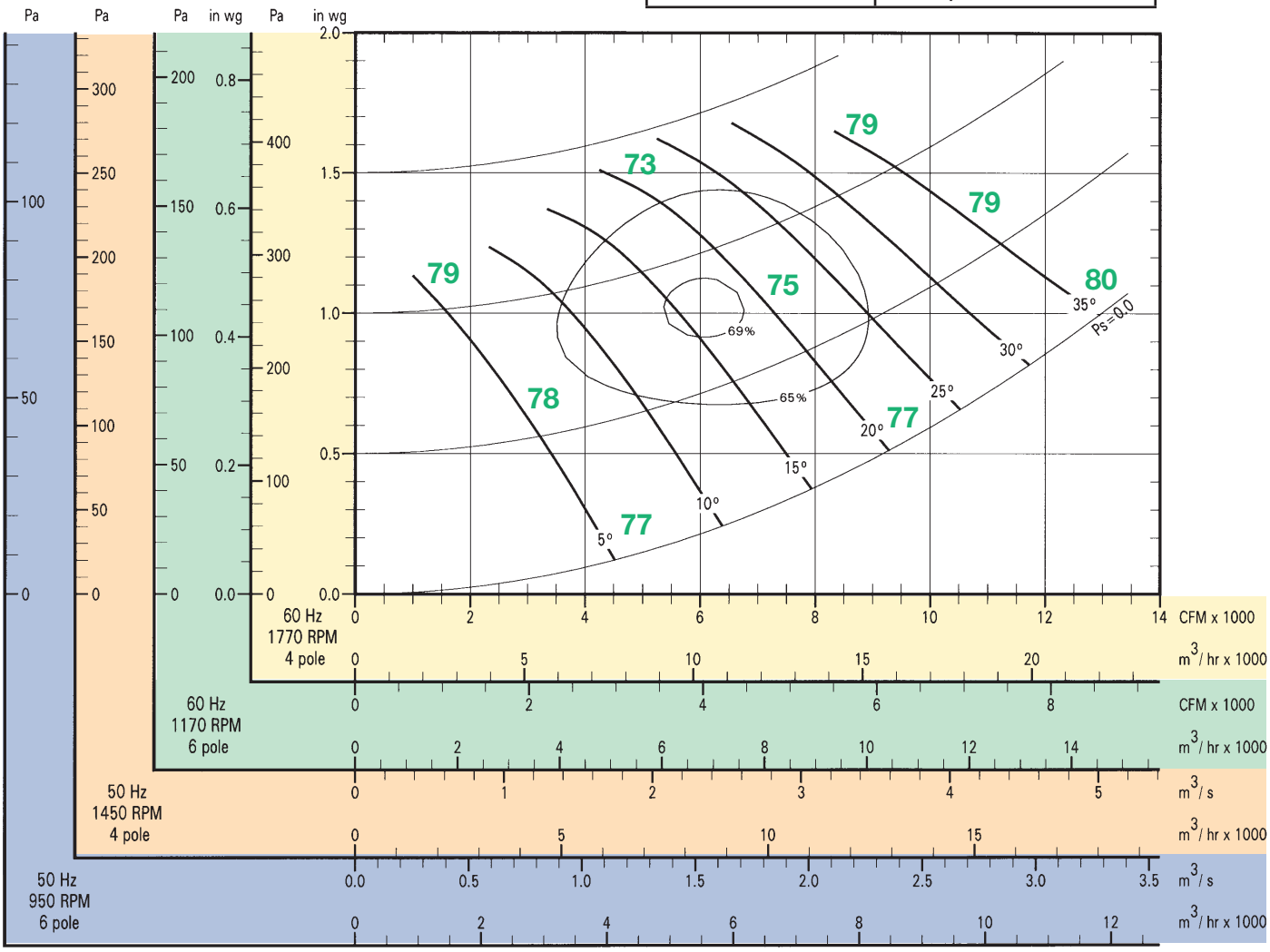
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 63-190 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 24.38 inches *(619 mm)*	
Outlet Velocity	ft/min = cfm / 3.24
	m/s = m^3/s / 0.30
Tip Speed	ft/min = rpm X 6.38
	m/s = rpm X 1.95

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	0.50/0.37	0.90/0.67	1.32/0.99	1.79/1.34	2.33/1.74	2.98/2.22	3.77/2.81
1170 (Bhp/kW)	0.14/0.11	0.26/0.19	0.38/0.29	0.52/0.39	0.67/0.50	0.86/0.64	1.09/0.81
1450 (kW)	0.20	0.37	0.54	0.73	0.96	1.22	1.55
950 (kW)	0.06	0.10	0.15	0.21	0.27	0.34	0.44

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+5	-6.5
950	-6	-17.5

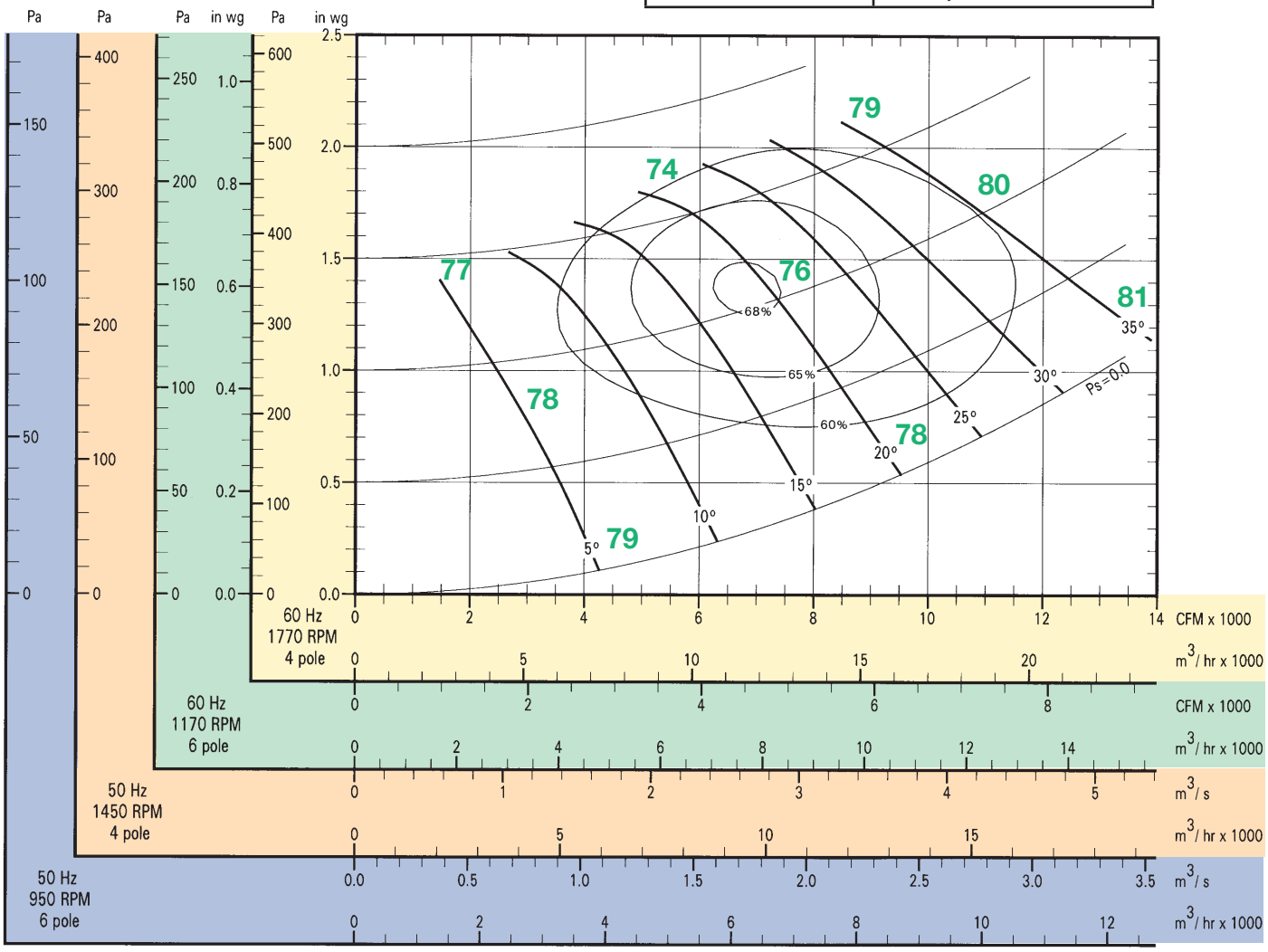
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 63-190 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 24.38 inches *(619 mm)*	
Outlet Velocity	ft/min = cfm / 3.24
	m/s = m^3/s / 0.30
Tip Speed	ft/min = rpm X 6.38
	m/s = rpm X 1.95

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	0.74/0.56	1.28/0.96	1.84/1.37	2.42/1.81	3.10/2.31	3.93/2.93	4.97/3.71
1170 (Bhp/kW)	0.22/0.16	0.37/0.28	0.53/0.40	0.70/0.52	0.90/0.67	1.14/0.85	1.43/1.07
1450 (kW)	0.31	0.53	0.75	0.99	1.27	1.61	2.04
950 (kW)	0.09	0.15	0.21	0.28	0.36	0.45	0.57

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+5	-6.5
950	-6	-17.5

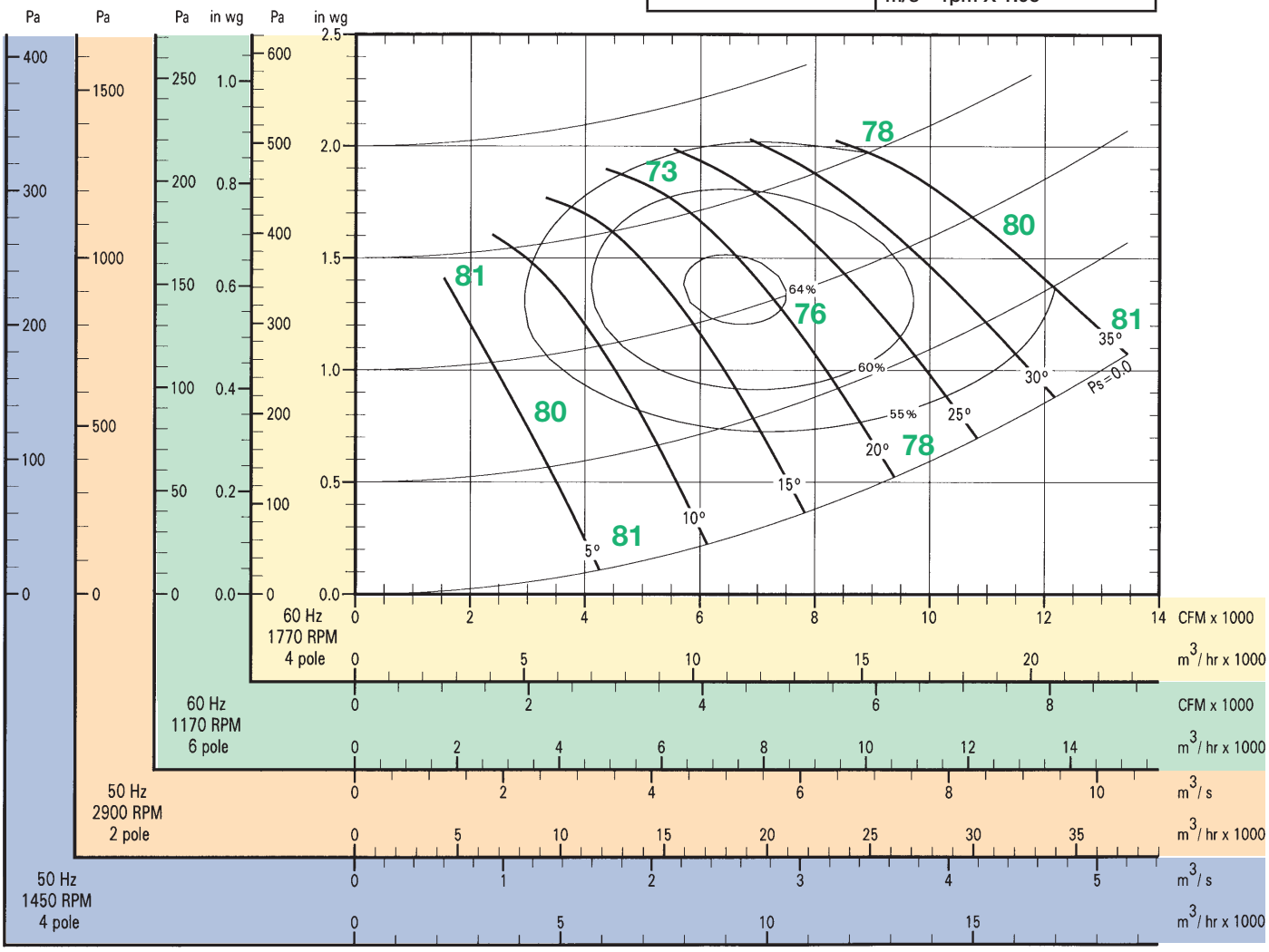
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 63-275 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 24.38 inches *(619 mm)*	
Outlet Velocity	ft/min = cfm / 3.24
	m/s = m^3/s / 0.30
Tip Speed	ft/min = rpm X 6.38
	m/s = rpm X 1.95

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	0.75/0.56	1.30/0.97	1.89/1.41	2.53/1.89	3.26/2.43	4.10/3.06	5.08/3.79
1170 (Bhp/kW)	0.22/0.16	0.38/0.28	0.55/0.41	0.73/0.55	0.94/0.70	1.18/0.88	1.47/1.10
2900 (kW)	2.45	4.27	6.20	8.31	10.7	13.5	16.7
1450 (kW)	0.31	0.53	0.77	1.04	1.34	1.68	2.09

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+10	-1.5
1170	-	-11.5
2900	+23	+11.5
1450	+5	-6.5

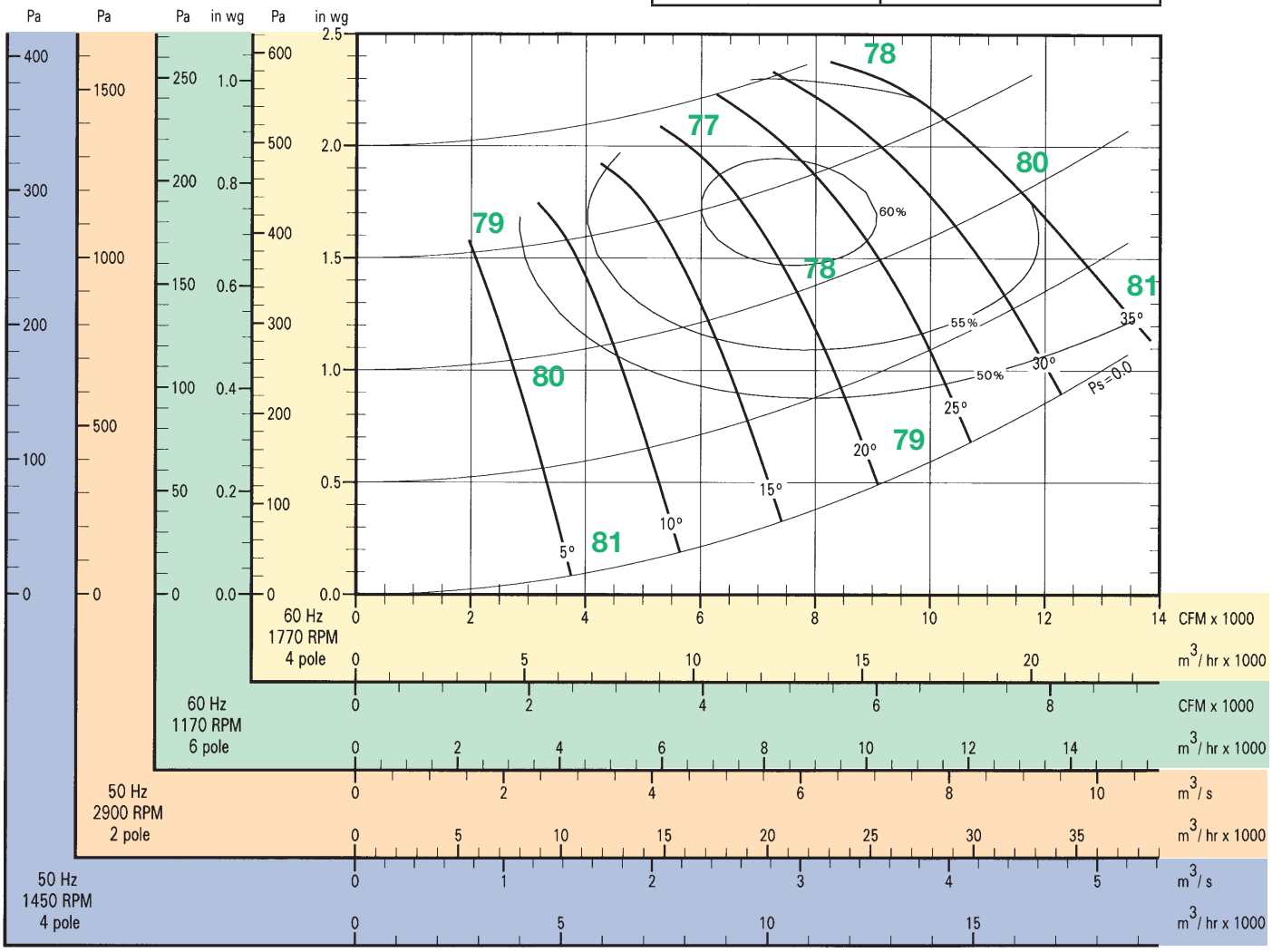
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 63-275 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 24.38 inches *(619 mm)*	
Outlet Velocity	ft/min = cfm / 3.24
	m/s = m^3/s / 0.30
Tip Speed	ft/min = rpm X 6.38
	m/s = rpm X 1.95

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	1.08/0.81	1.71/1.27	2.38/1.78	3.12/2.33	3.97/2.97	4.97/3.71	6.15/4.59
1170 (Bhp/kW)	0.31/0.23	0.49/0.37	0.69/0.51	0.90/0.67	1.15/0.86	1.44/1.07	1.78/1.33
2900 (kW)	3.56	5.60	7.81	10.3	13.0	16.3	20.2
1450 (kW)	0.44	0.70	0.98	1.28	1.63	2.04	2.52

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
2900	+23	+11.5
1450	+6	-5.5

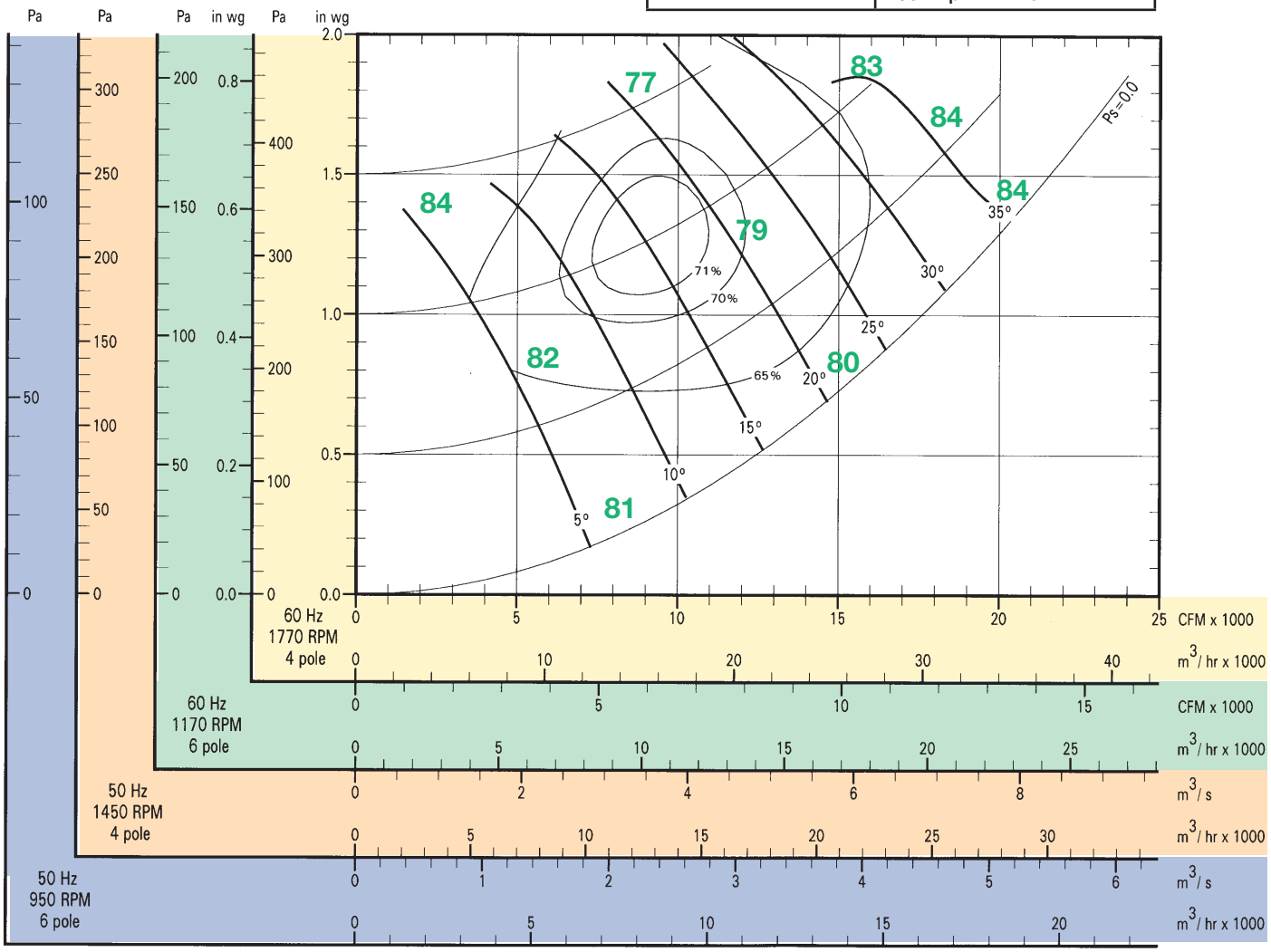
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 72-190 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 28.38 inches *(721 mm)*	
Outlet Velocity	ft/min = cfm / 4.39
	m/s = m^3/s / 0.41
Tip Speed	ft/min = rpm X 7.43
	m/s = rpm X 2.26

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	0.93/0.69	1.69/1.26	2.53/1.89	3.44/2.57	4.51/3.36	5.82/4.34	7.45/5.56
1170 (Bhp/kW)	0.27/0.20	0.49/0.36	0.73/0.54	0.99/0.74	1.30/0.97	1.68/1.25	2.15/1.61
1450 (kW)	0.38	0.69	1.04	1.41	1.85	2.39	3.06
950 (kW)	0.11	0.20	0.29	0.40	0.52	0.67	0.86

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+6	-5.5
950	-5	-16.5

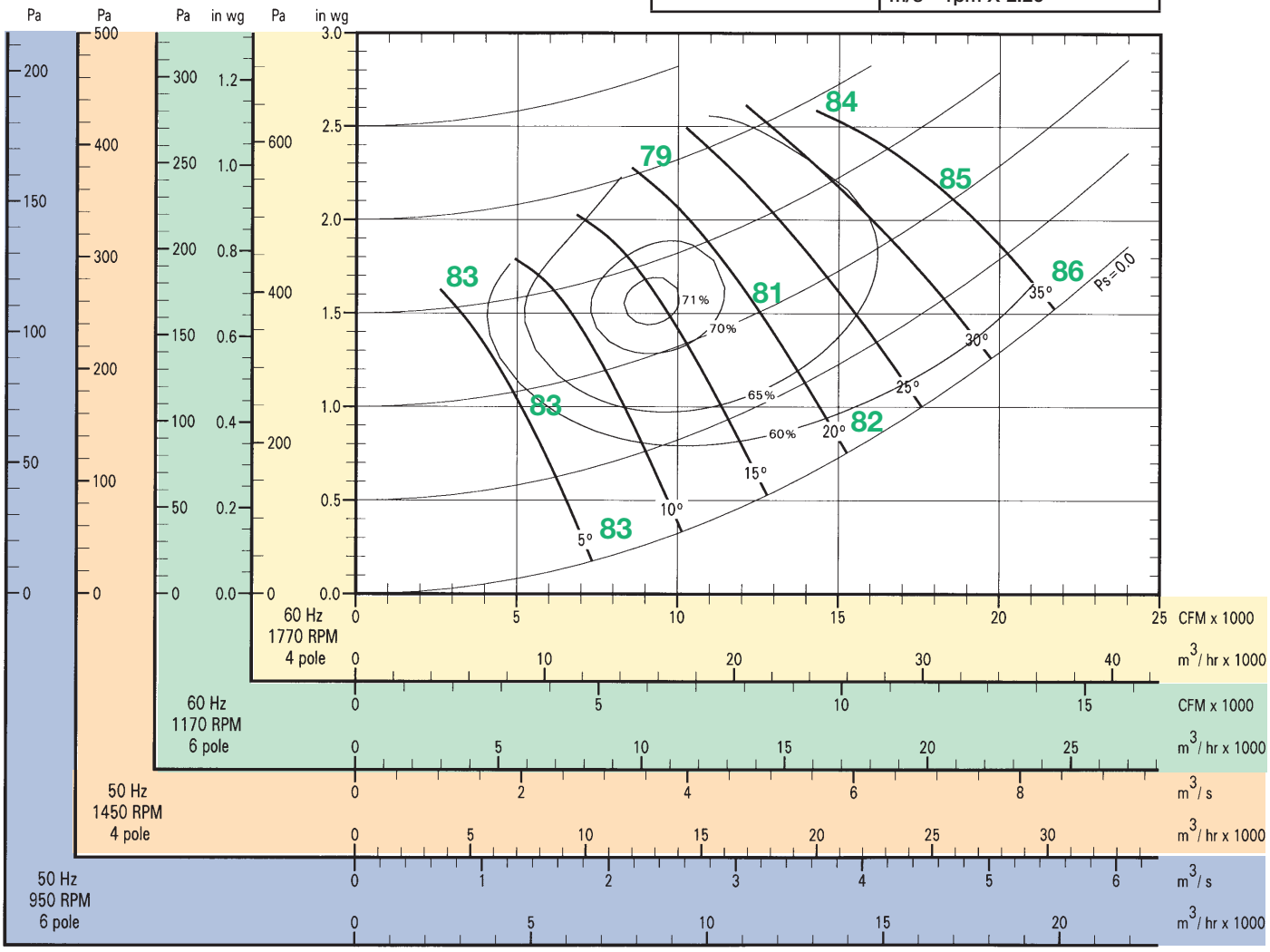
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 72-190 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 28.38 inches *(721 mm)*	
Outlet Velocity	ft/min = cfm / 4.39
	m/s = m^3/s / 0.41
Tip Speed	ft/min = rpm X 7.43
	m/s = rpm X 2.26

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	1.43/1.07	2.33/1.74	3.44/2.56	4.73/3.53	6.22/4.64	7.91/5.90	9.85/7.35
1170 (Bhp/kW)	0.41/0.31	0.67/0.50	0.99/0.74	1.37/1.02	1.80/1.34	2.28/1.70	2.84/2.12
1450 (kW)	0.59	0.96	1.41	1.94	2.55	3.24	4.04
950 (kW)	0.17	0.27	1.40	0.55	0.72	0.91	1.14

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+6	-5.5
950	-5	-16.5

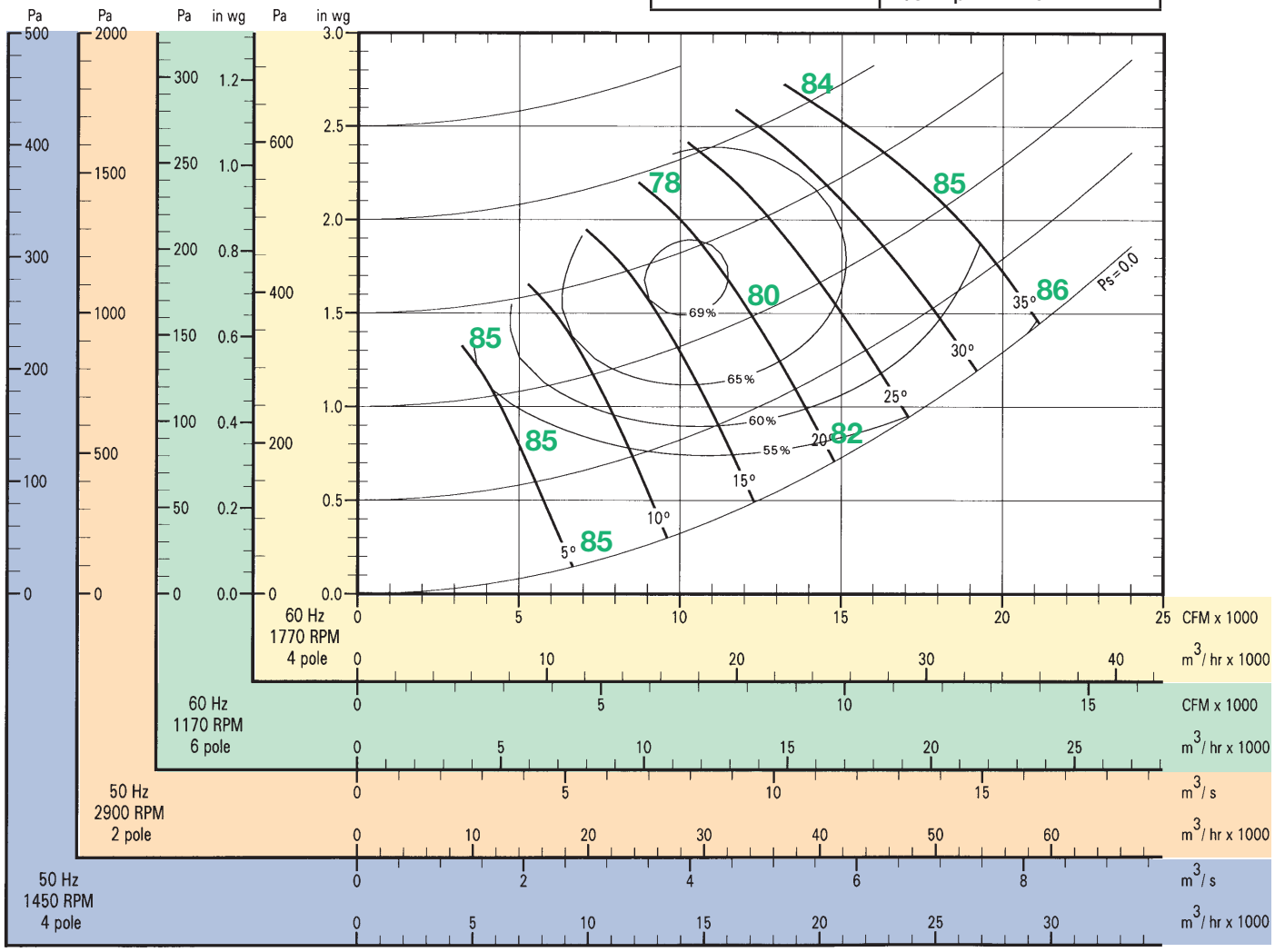
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 72-275 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 28.38 inches *(721 mm)*	
Outlet Velocity	ft/min = cfm / 4.39
	m/s = m^3/s / 0.41
Tip Speed	ft/min = rpm X 7.43
	m/s = rpm X 2.26

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	1.29/0.97	2.23/1.67	3.33/2.49	4.60/3.44	6.08/4.53	7.77/5.79	9.81/7.32
1170 (Bhp/kW)	0.37/0.28	0.65/0.48	0.96/0.72	1.33/0.99	1.75/1.31	2.24/1.67	2.83/2.11
2900 (kW)	4.25	7.33	10.9	15.1	19.9	25.5	32.2
1450 (kW)	0.53	0.92	1.37	1.89	2.49	3.19	4.02

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
2900	+24	+12.5
1450	+6	-5.5

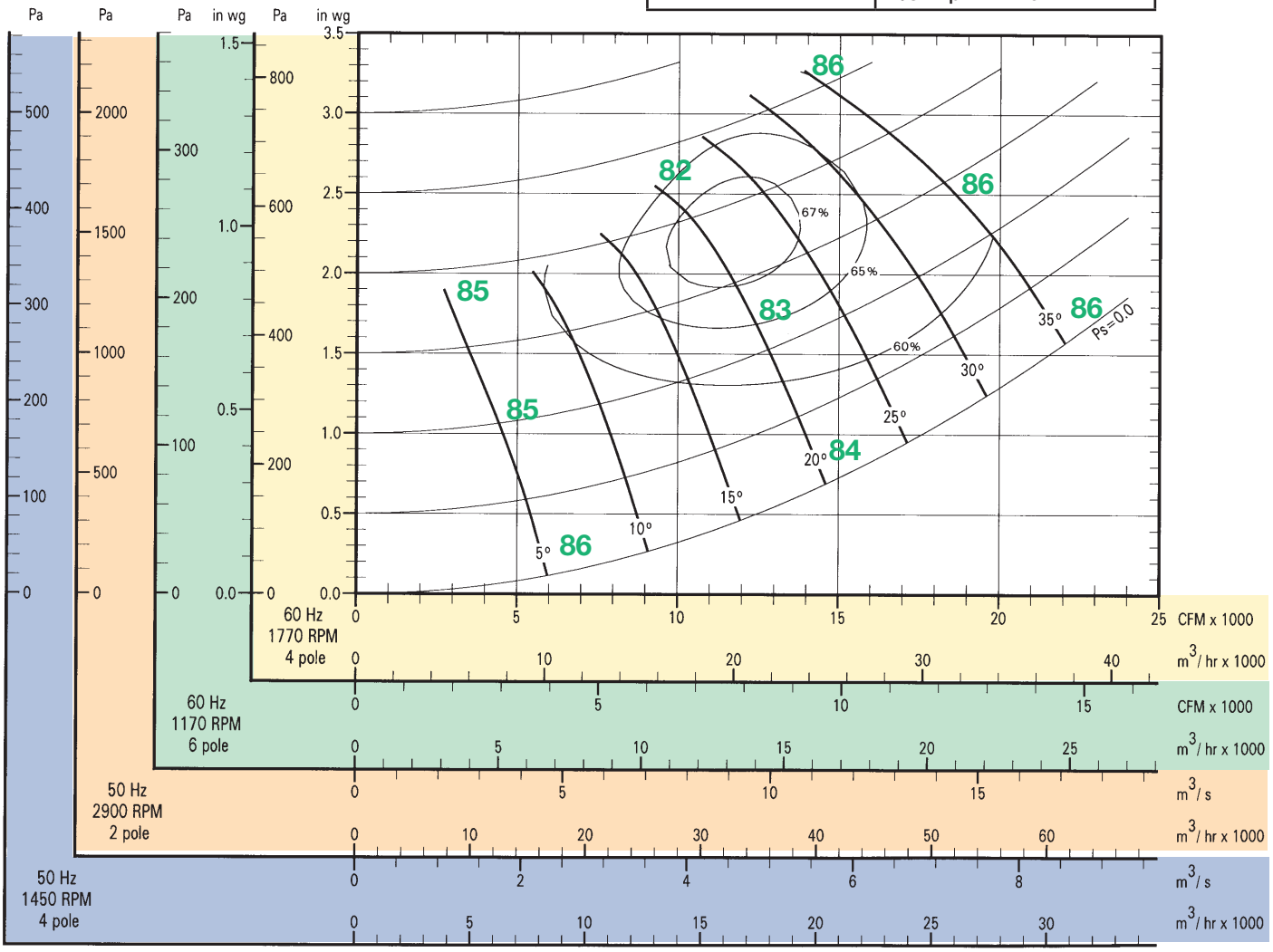
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 72-275 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 28.38 inches *(721 mm)*	
Outlet Velocity	ft/min = cfm / 4.39
	m/s = m^3/s / 0.41
Tip Speed	ft/min = rpm X 7.43
	m/s = rpm X 2.26

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	1.70/1.27	2.93/2.19	4.27/3.18	5.78/4.31	7.52/5.61	9.61/7.17	12.1/9.06
1170 (Bhp/kW)	0.49/0.37	0.85/0.63	1.23/0.92	1.67/1.24	2.17/1.62	2.78/2.07	3.51/2.62
2900 (kW)	5.59	9.62	14.0	19.0	24.7	31.5	39.9
1450 (kW)	0.70	1.20	1.75	2.37	3.09	3.94	4.98

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+10	-1.5
1170	-	-11.5
2900	+23	+11.5
1450	+5	-6.5

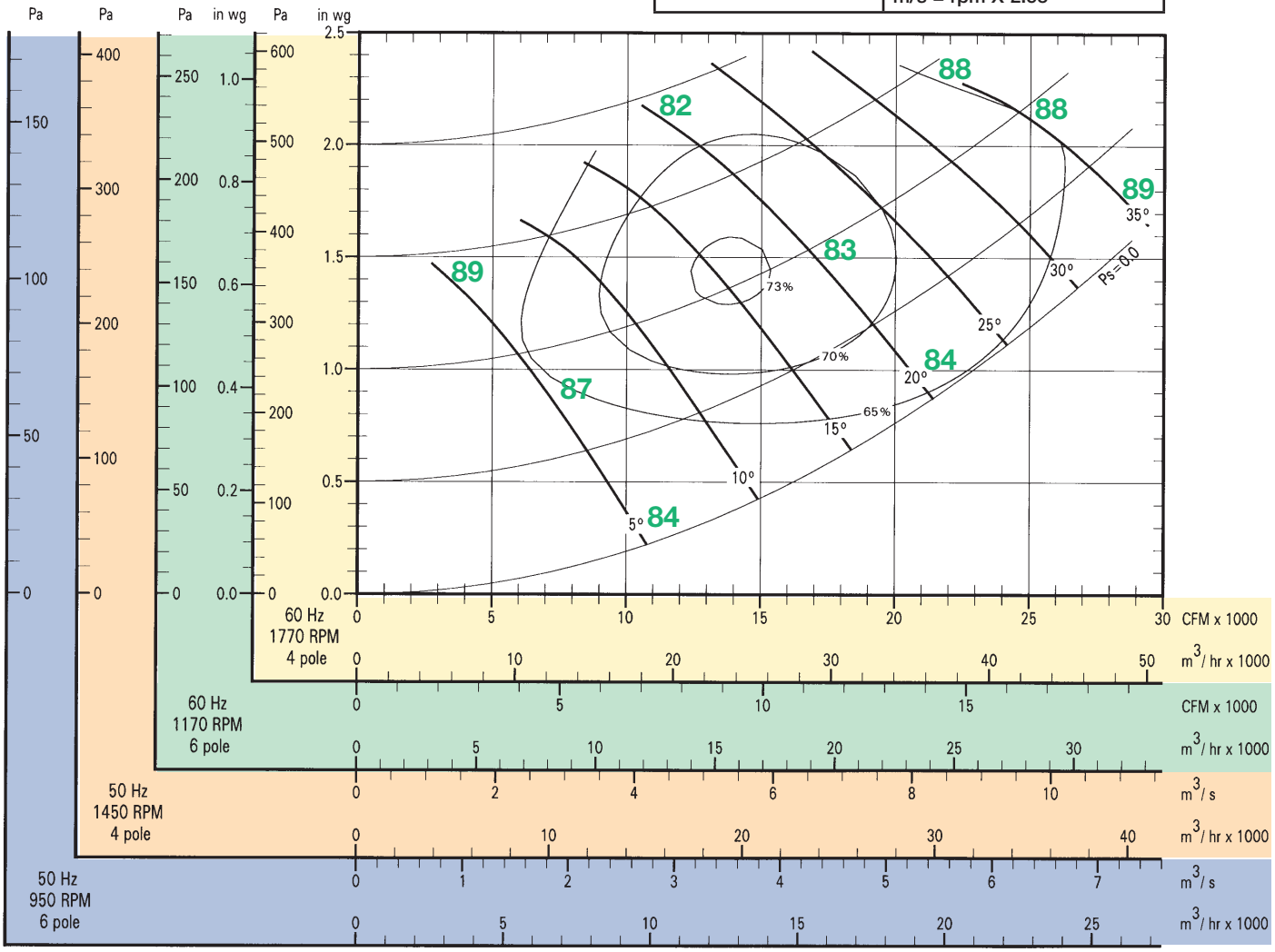
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 80-190 4 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 32.38 inches *(822 mm)*	
Outlet Velocity	ft/min = cfm / 5.72
	m/s = m^3/s / 0.53
Tip Speed	ft/min = rpm X 8.48
	m/s = rpm X 2.58

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	1.56/1.16	2.80/2.09	4.16/3.10	5.73/4.28	7.63/5.69	9.95/7.43	12.8/9.55
1170 (Bhp/kW)	0.45/0.34	0.81/0.60	1.20/0.90	1.66/1.24	2.20/1.64	2.88/2.14	3.70/2.76
1450 (kW)	0.64	1.15	1.71	2.35	3.13	4.08	5.25
950 (kW)	0.18	0.32	0.48	0.66	0.88	1.15	1.48

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+6	-5.5
950	-5	-16.5

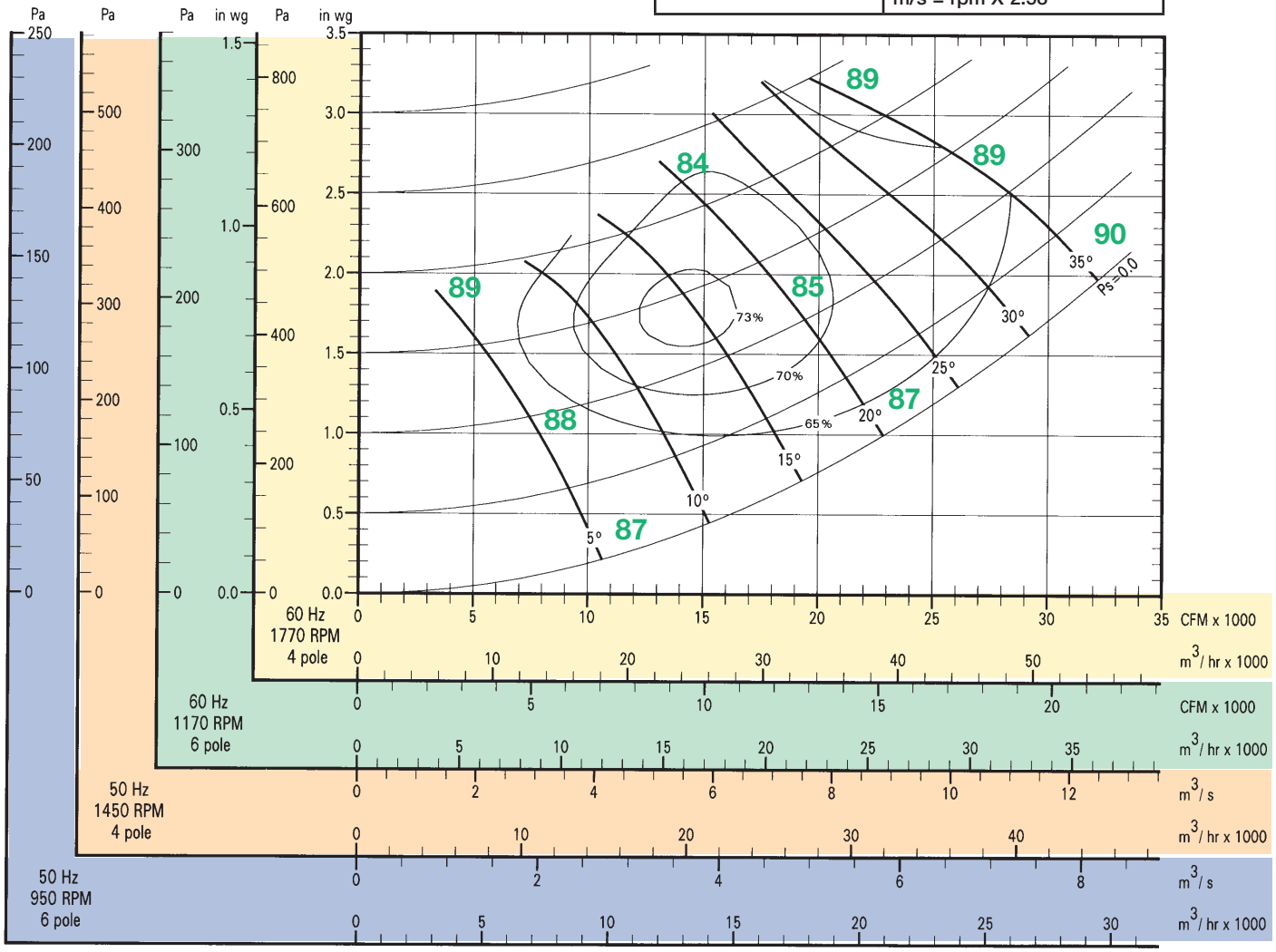
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 80-190 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 32.38 inches *(822 mm)*	
Outlet Velocity	ft/min = cfm / 5.72
	$m/s = m^3/s / 0.53$
Tip Speed	ft/min = rpm X 8.48
	m/s = rpm X 2.58

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	2.20/1.64	3.88/2.89	5.87/4.38	8.12/6.06	10.7/7.97	13.7/10.2	17.3/12.9
1170 (Bhp/kW)	0.64/0.47	1.12/0.84	1.70/1.26	2.35/1.75	3.09/2.30	3.94/2.94	4.99/3.72
1450 (kW)	0.90	1.59	2.41	3.33	4.38	5.60	7.09
950 (kW)	0.25	0.45	0.69	0.94	1.23	1.57	1.99

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+6	-5.5
950	-5	-16.5

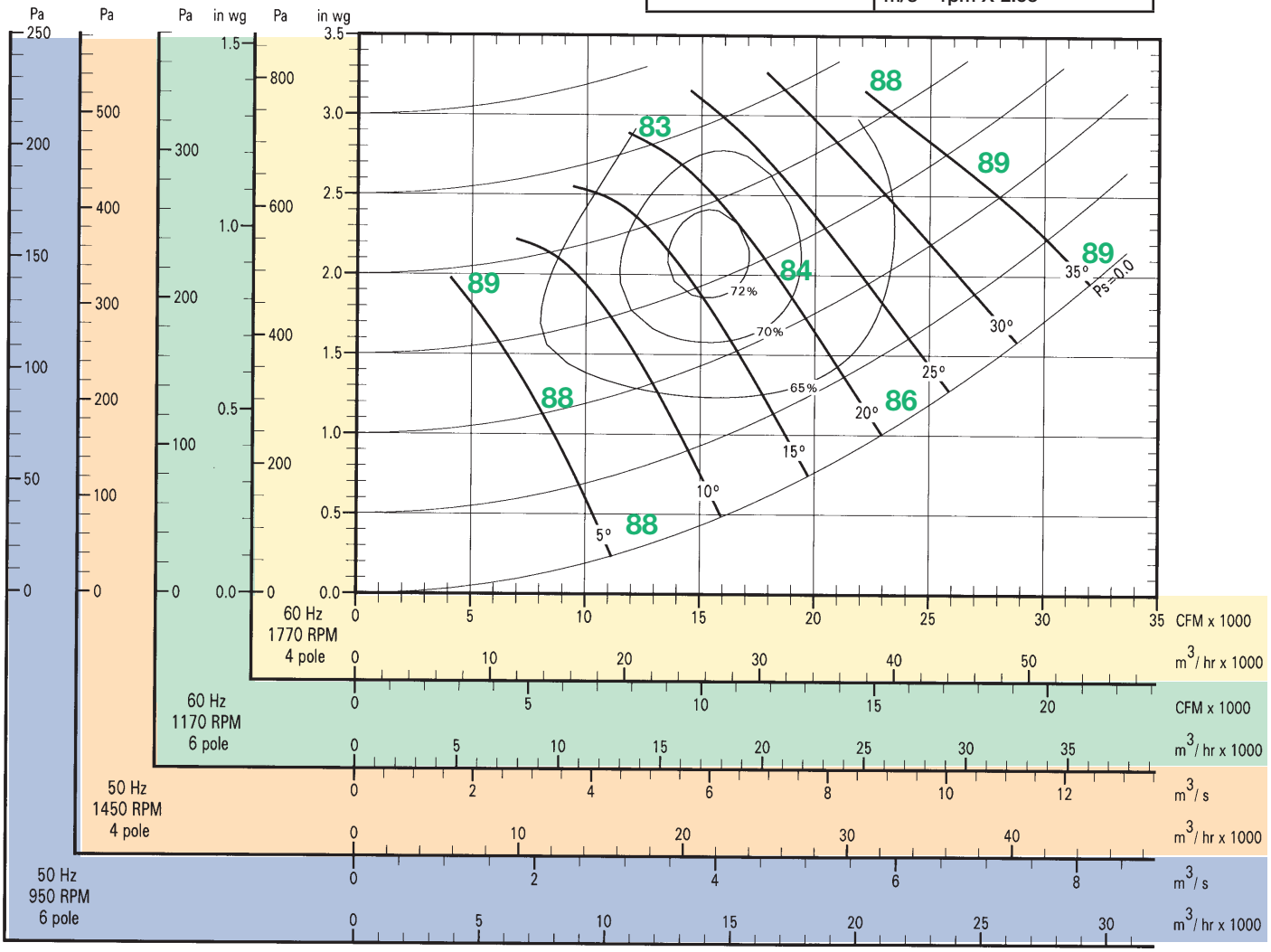
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 80-275 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 32.38 inches *(822 mm)*	
Outlet Velocity	ft/min = cfm / 5.72
	m/s = m^3/s / 0.53
Tip Speed	ft/min = rpm X 8.48
	m/s = rpm X 2.58

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	2.43/1.81	4.45/3.32	6.44/4.80	8.55/6.38	11.0/8.21	14.0/10.4	17.9/13.4
1170 (Bhp/kW)	0.70/0.52	1.29/0.96	1.86/1.39	2.47/1.84	3.18/2.37	4.04/3.02	5.18/3.87
1450 (kW)	1.00	1.83	2.64	3.51	4.51	5.74	7.36
950 (kW)	0.28	0.51	0.74	0.99	1.27	1.61	2.07

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+6	-5.5
950	-5	-16.5

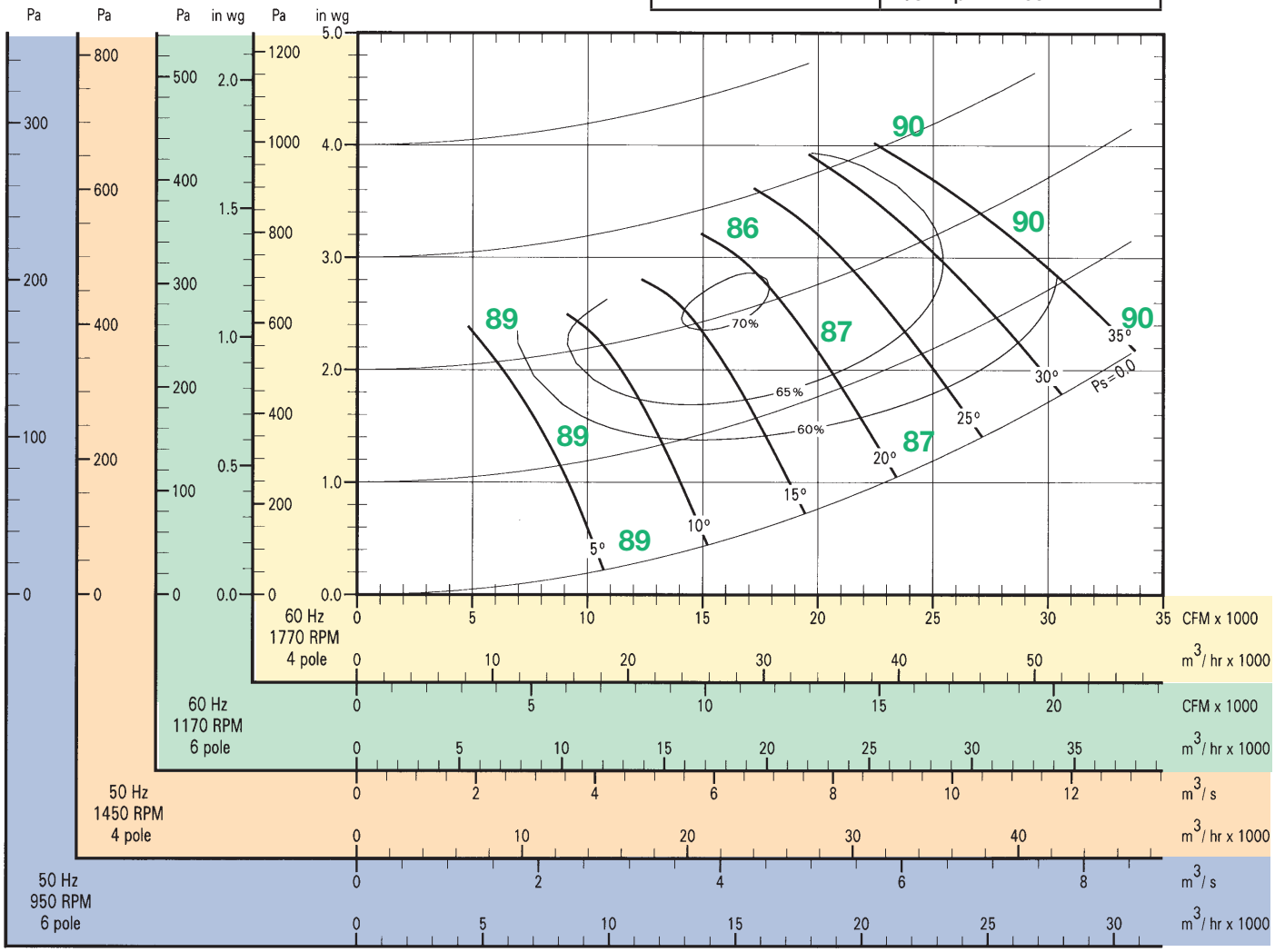
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 80-275 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 32.38 inches *(822 mm)*	
Outlet Velocity	ft/min = cfm / 5.72
	m/s = m^3/s / 0.53
Tip Speed	ft/min = rpm X 8.48
	m/s = rpm X 2.58

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	3.54/2.64	5.62/4.20	8.29/6.18	11.4/8.49	14.8/11.1	18.7/14.0	23.1/17.2
1170 (Bhp/kW)	1.02/0.76	1.62/1.21	2.39/1.79	3.29/2.45	4.28/3.20	5.40/4.03	6.66/4.97
1450 (kW)	1.45	2.31	3.40	4.67	6.08	7.67	9.46
950 (kW)	0.41	0.65	0.96	1.31	1.71	2.16	2.66

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+10	-1.5
1170	-	-11.5
1450	+5	-6.5
950	-6	-17.5

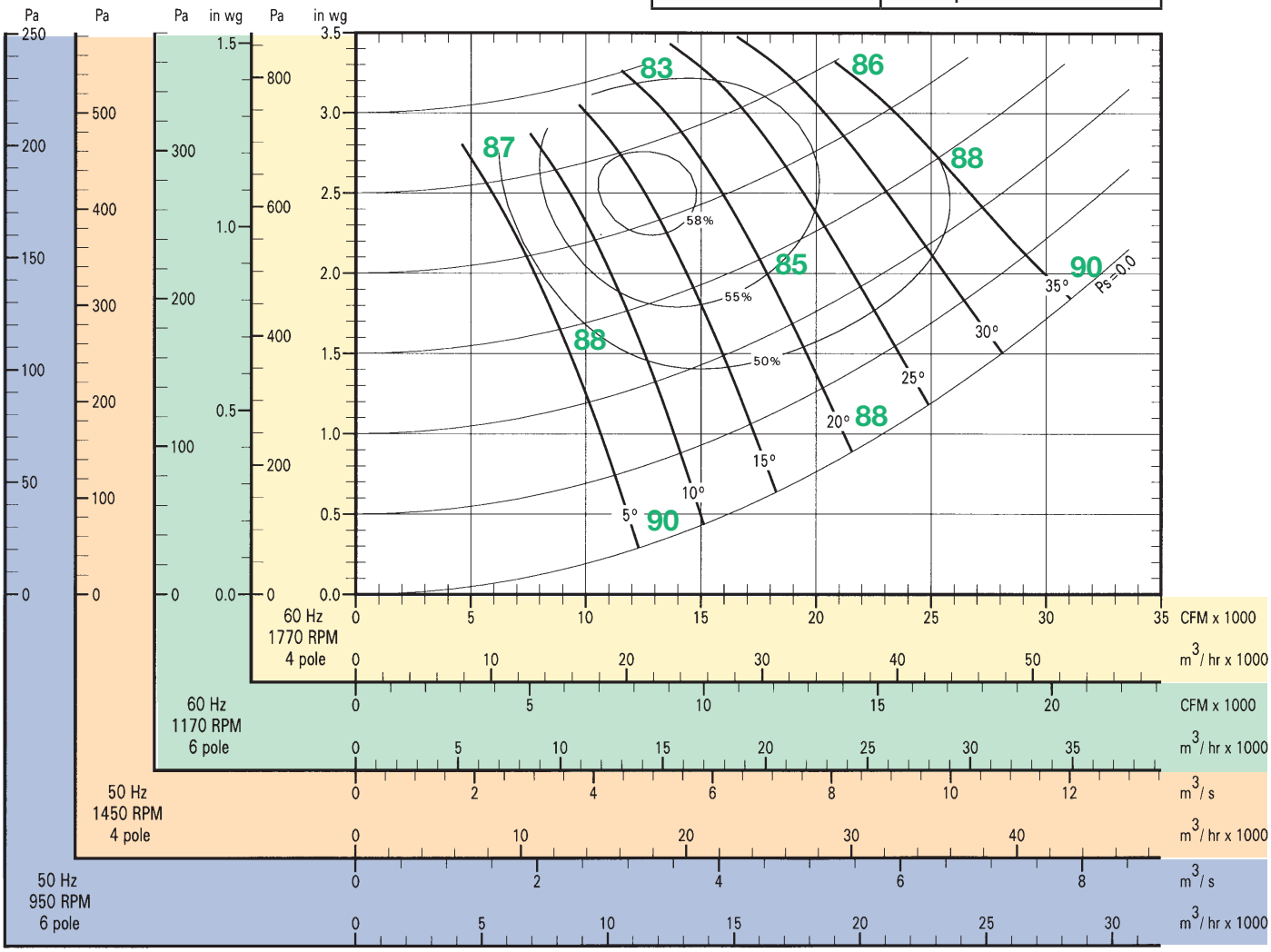
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 80-400 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 32.38 inches *(822 mm)*	
Outlet Velocity	ft/min = cfm / 5.72
	m/s = m^3/s / 0.53
Tip Speed	ft/min = rpm X 8.48
	m/s = rpm X 2.58

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	4.98/3.72	6.43/4.80	8.55/6.38	11.2/8.36	14.4/10.7	17.9/13.4	21.9/16.3
1170 (Bhp/kW)	1.44/1.07	1.86/1.39	2.47/1.84	3.24/2.42	4.14/3.09	5.18/3.86	6.32/4.71
1450 (kW)	2.04	2.64	3.51	4.60	5.88	7.35	8.97
950 (kW)	0.57	0.74	0.99	1.29	1.65	2.07	2.52

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+6	-5.5
950	-5	-16.5

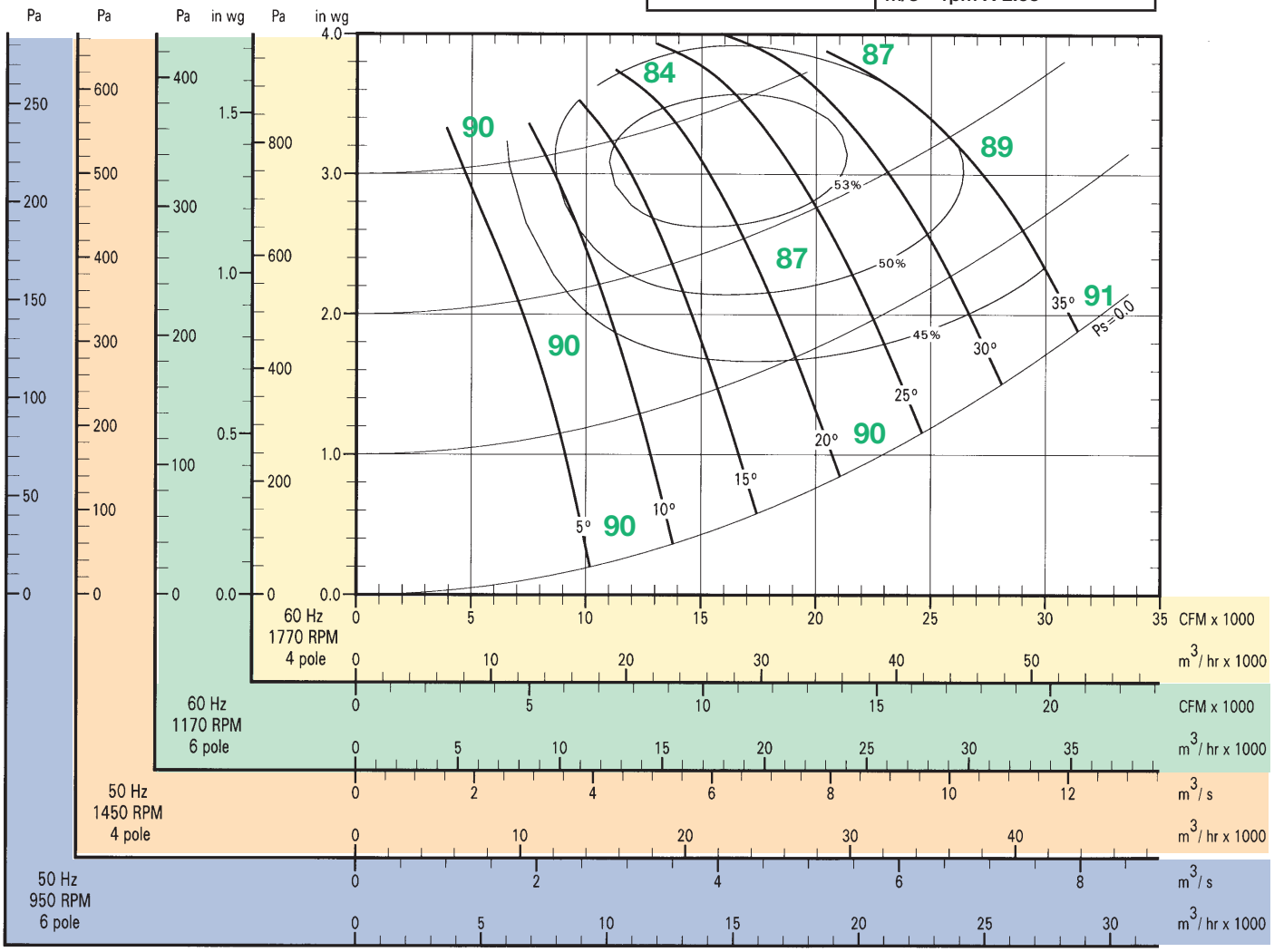
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 80-400 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 32.38 inches *(822 mm)*	
Outlet Velocity	ft/min = cfm / 5.72
	m/s = m^3/s / 0.53
Tip Speed	ft/min = rpm X 8.48
	m/s = rpm X 2.58

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	6.14/4.58	8.36/6.24	10.7/8.01	13.7/10.3	17.4/13.0	21.7/16.2	26.5/19.8
1170 (Bhp/kW)	1.77/1.32	2.42/1.80	3.10/2.31	3.97/2.96	5.02/3.74	6.26/4.67	7.66/5.72
1450 (kW)	2.54	3.43	4.40	5.64	7.13	8.89	10.9
950 (kW)	0.71	0.96	1.24	1.58	2.00	2.50	3.06

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+10	-1.5
1170	-	-11.5
1450	+5	-6.5
950	-5	-16.5

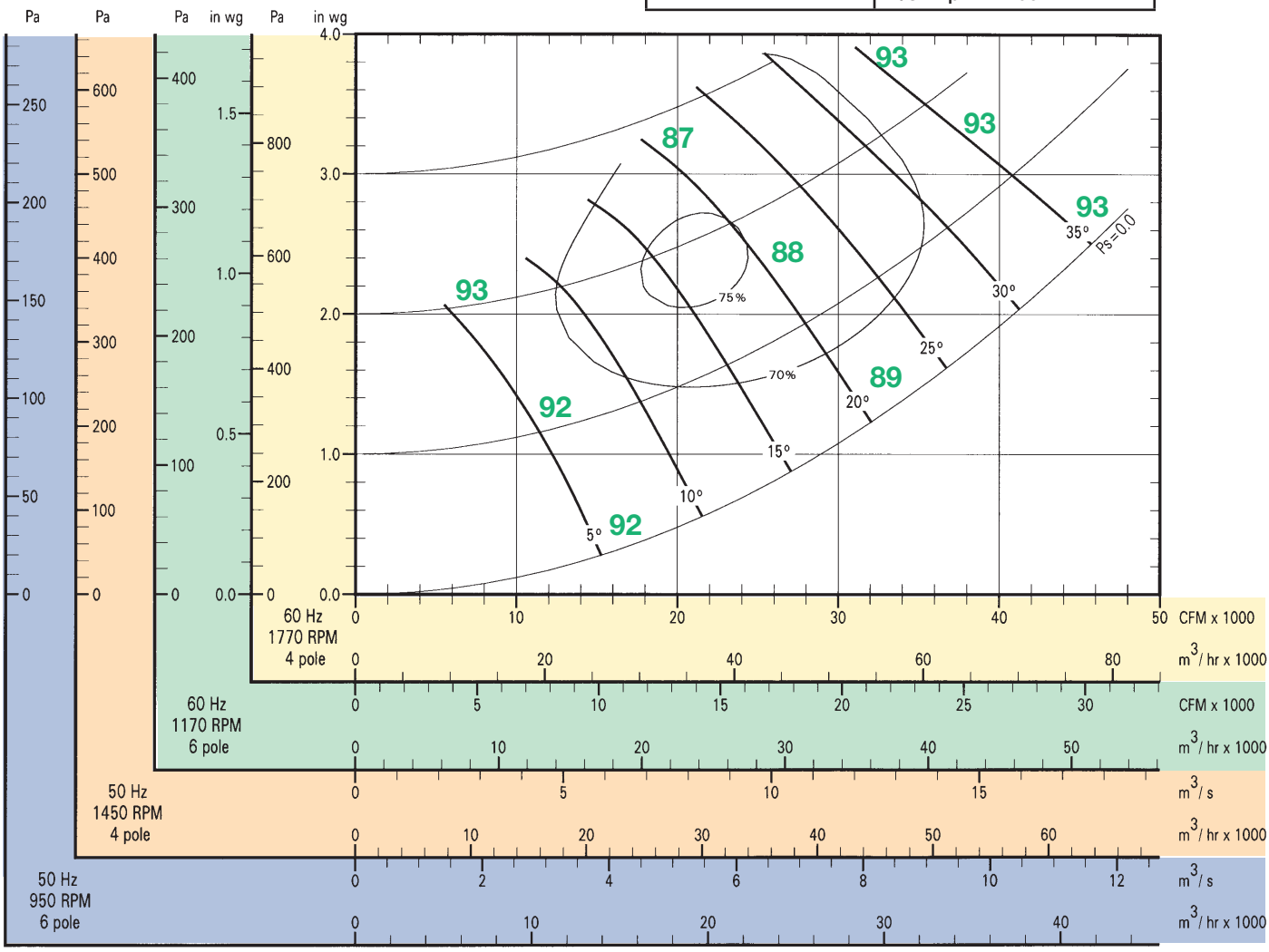
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 90-275 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 36.38 inches *(924 mm)*	
Outlet Velocity	ft/min = cfm / 7.22
	m/s = m^3/s / 0.67
Tip Speed	ft/min = rpm X 9.52
	m/s = rpm X 2.90

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	3.76/2.81	6.26/4.67	9.39/7.00	13.1/9.78	17.5/13.0	22.6/16.9	28.7/21.4
1170 (Bhp/kW)	1.09/0.81	1.81/1.35	2.71/2.02	3.78/2.82	5.04/3.76	6.53/4.87	8.28/6.18
1450 (kW)	1.54	2.57	3.85	5.37	7.16	9.27	11.8
950 (kW)	0.43	0.72	1.08	1.51	2.01	2.61	3.31

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+5	-6.5
950	-5	-16.5

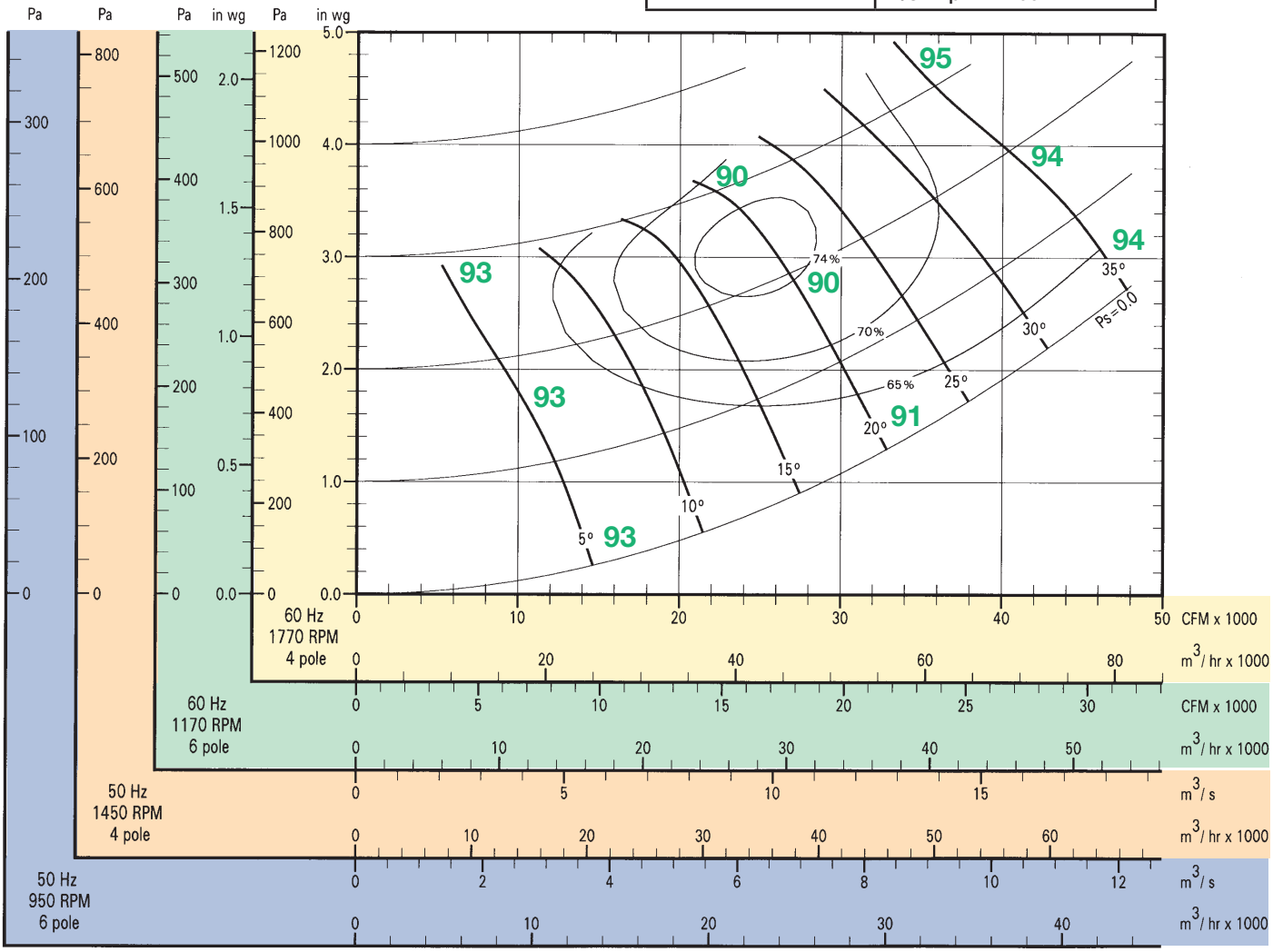
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 90-275 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 36.38 inches *(924 mm)*	
Outlet Velocity	ft/min = cfm / 7.22
	m/s = m^3/s / 0.67
Tip Speed	ft/min = rpm X 9.52
	m/s = rpm X 2.90

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	5.03/3.75	8.89/6.63	13.0/9.66	17.4/13.0	22.6/16.9	29.1/21.7	37.2/27.8
1170 (Bhp/kW)	1.45/1.08	2.57/1.92	3.74/2.79	5.02/3.75	6.53/4.87	8.41/6.27	10.8/8.02
1450 (kW)	2.06	3.65	5.31	7.13	9.28	11.9	15.3
950 (kW)	0.58	1.03	1.49	2.01	2.61	3.36	4.29

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+5	-6.5
950	-5	-16.5

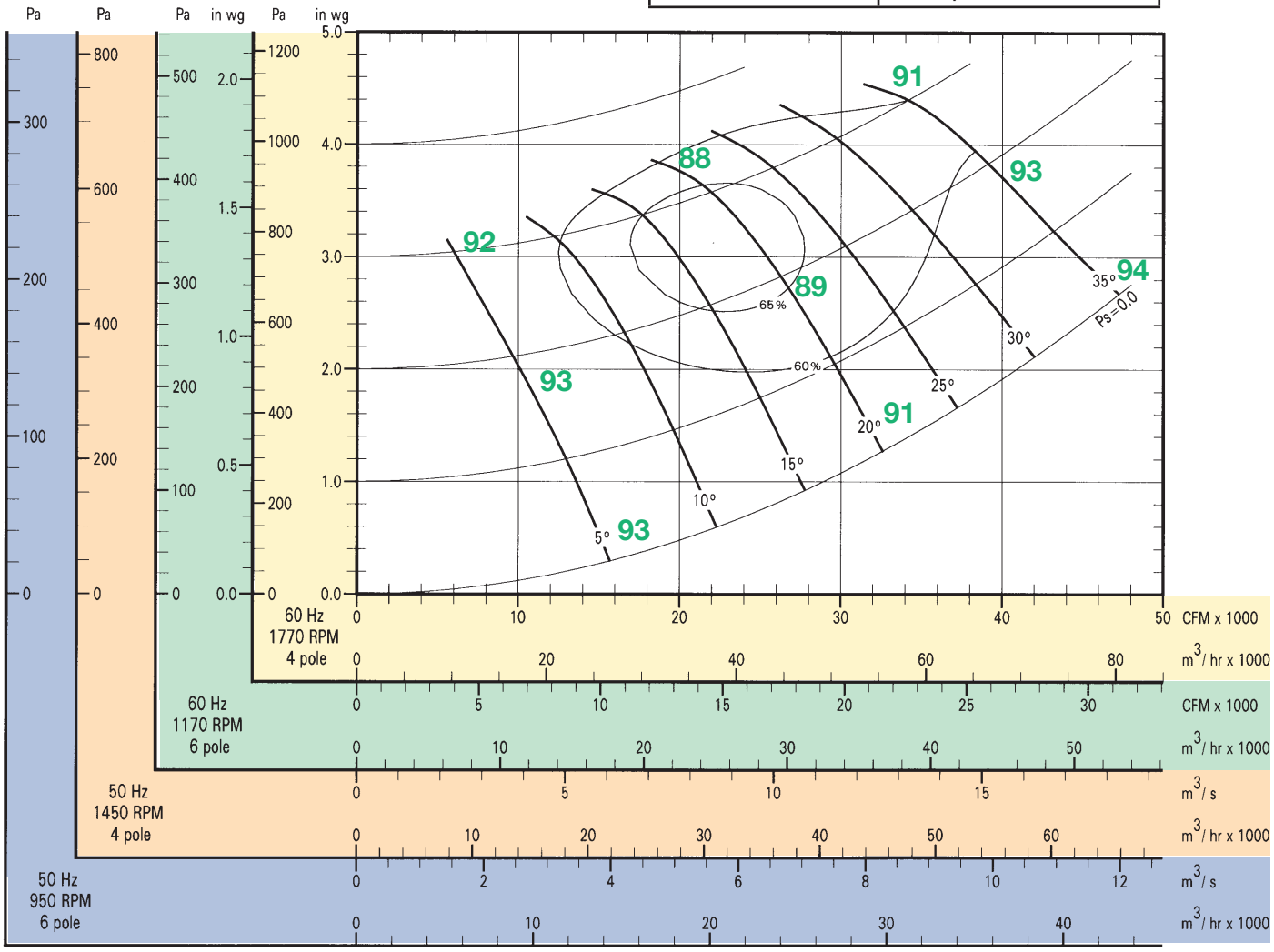
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 90-400 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 36.38 inches *(924 mm)*	
Outlet Velocity	ft/min = cfm / 7.22
	m/s = m^3/s / 0.67
Tip Speed	ft/min = rpm X 9.52
	m/s = rpm X 2.90

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	6.36/4.75	10.4/7.72	14.4/10.8	18.9/14.1	24.2/18.1	30.9/23.1	39.7/29.6
1170 (Bhp/kW)	1.84/1.37	2.99/2.23	4.17/3.11	5.46/4.07	6.99/5.22	8.93/6.66	11.5/8.55
1450 (kW)	2.61	4.25	5.92	7.75	9.93	12.7	16.3
950 (kW)	0.73	1.19	1.66	2.18	2.79	3.57	4.58

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+5	-6.5
950	-6	-17.5

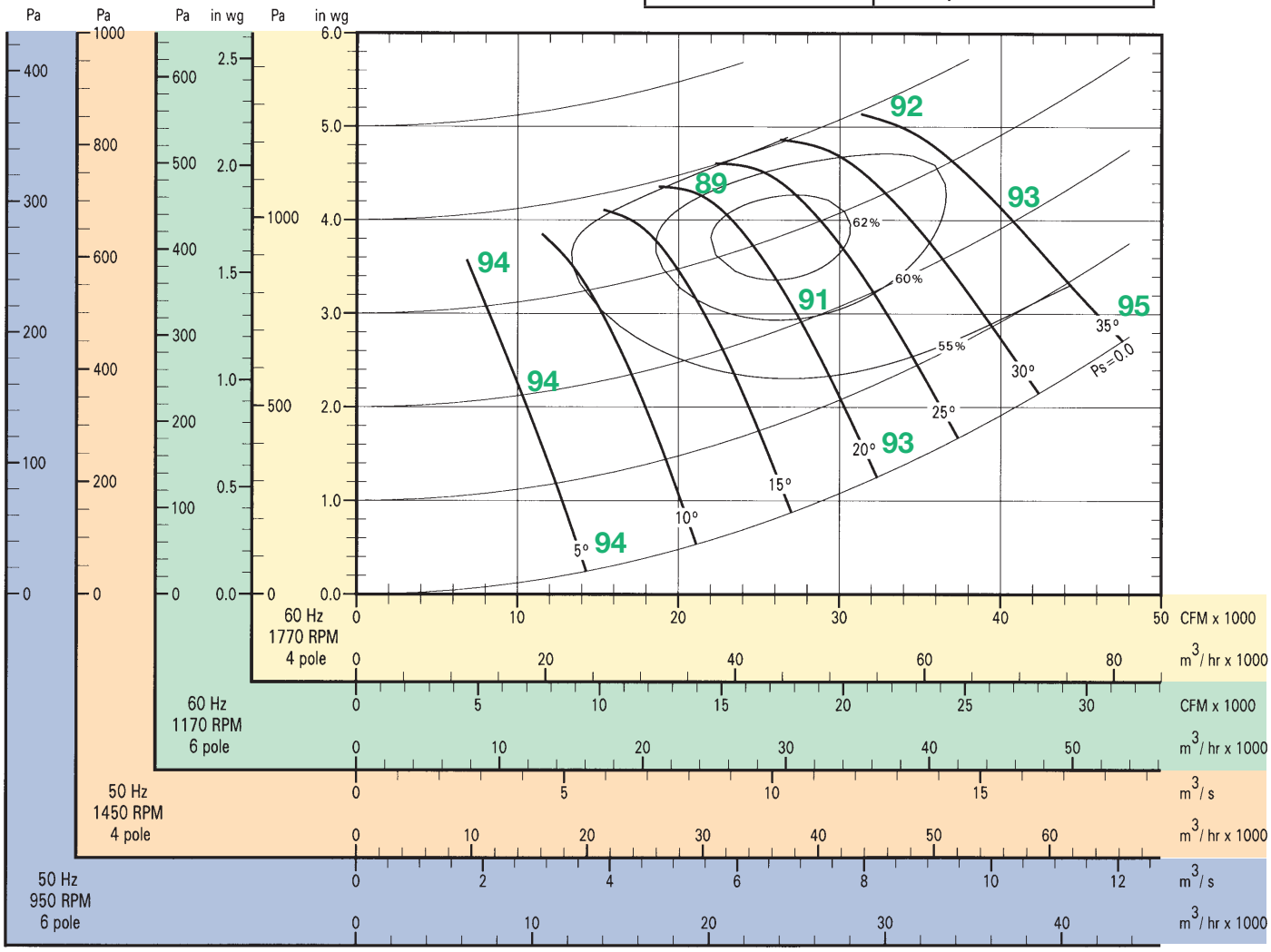
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 90-400 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 36.38 inches *(924 mm)*	
Outlet Velocity	ft/min = cfm / 7.22
	m/s = m^3/s / 0.67
Tip Speed	ft/min = rpm X 9.52
	m/s = rpm X 2.90

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	8.31/6.20	13.5/10.0	18.6/13.8	23.9/17.9	30.0/22.3	36.9/27.6	45.3/33.8
1170 (Bhp/kW)	2.40/1.79	3.89/2.90	5.36/4.00	6.91/5.16	8.65/6.45	10.7/7.96	13.1/9.75
1450 (kW)	3.41	5.52	7.61	9.82	12.3	15.2	18.6
950 (kW)	0.96	1.55	2.14	2.76	3.45	4.26	5.22

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+10	-1.5
1170	-	-11.5
1450	+5	-6.5
950	-6	-17.5

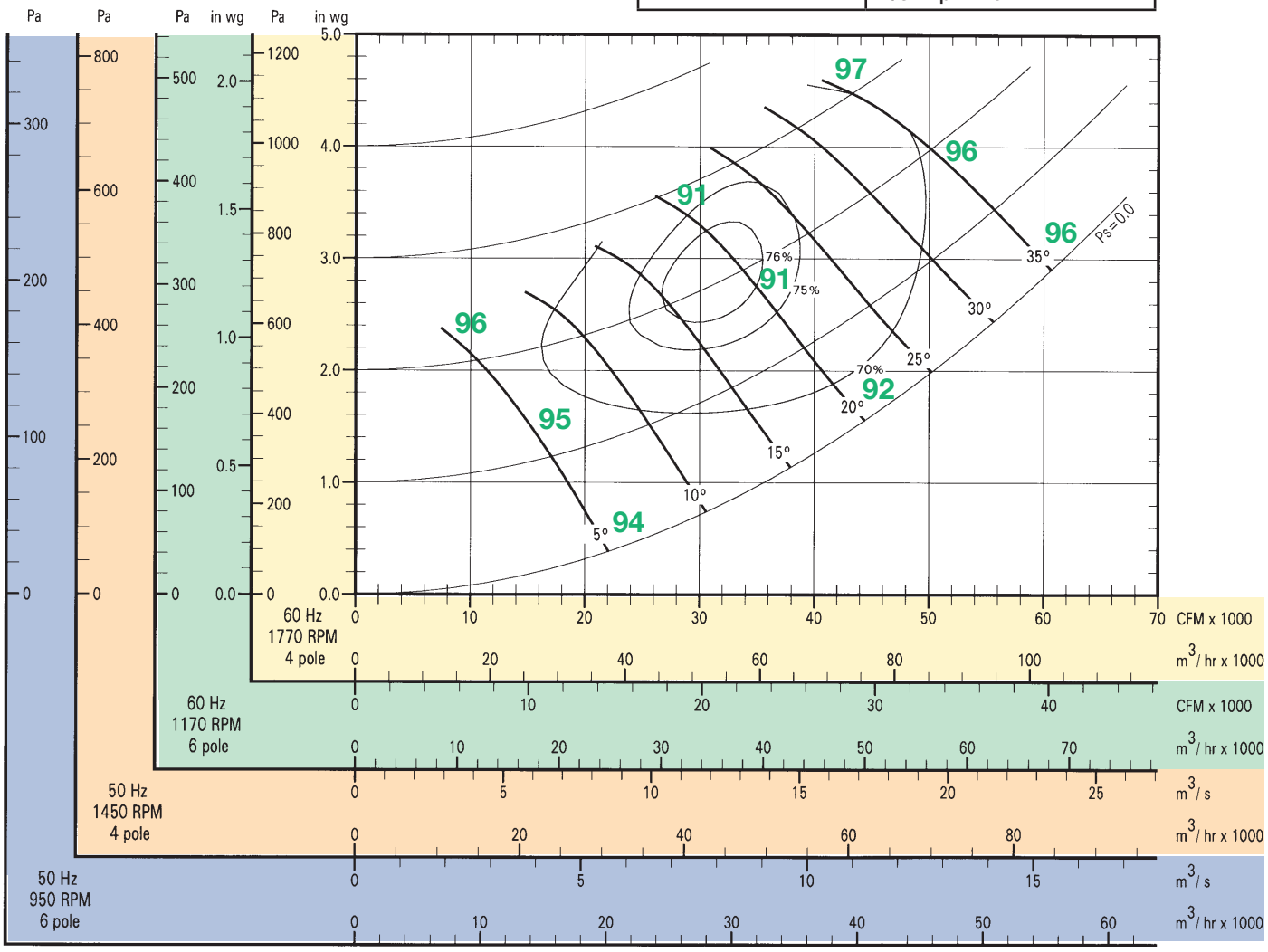
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 103-275 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 40.38 inches *(1026 mm)*	
Outlet Velocity	ft/min = cfm / 8.89
	m/s = m^3/s / 0.83
Tip Speed	ft/min = rpm X 10.6
	m/s = rpm X 3.22

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	5.61/4.18	9.93/7.40	14.9/11.1	20.6/15.3	27.2/20.3	35.2/26.2	45.2/33.8
1170 (Bhp/kW)	1.62/1.21	2.87/2.14	4.30/3.21	5.94/4.43	7.84/5.85	10.2/7.58	13.1/9.75
1450 (kW)	2.30	4.07	6.11	8.43	11.1	14.4	18.6
950 (kW)	0.65	1.14	1.72	2.37	3.13	4.06	5.22

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+5	-6.5
950	-5	-16.5

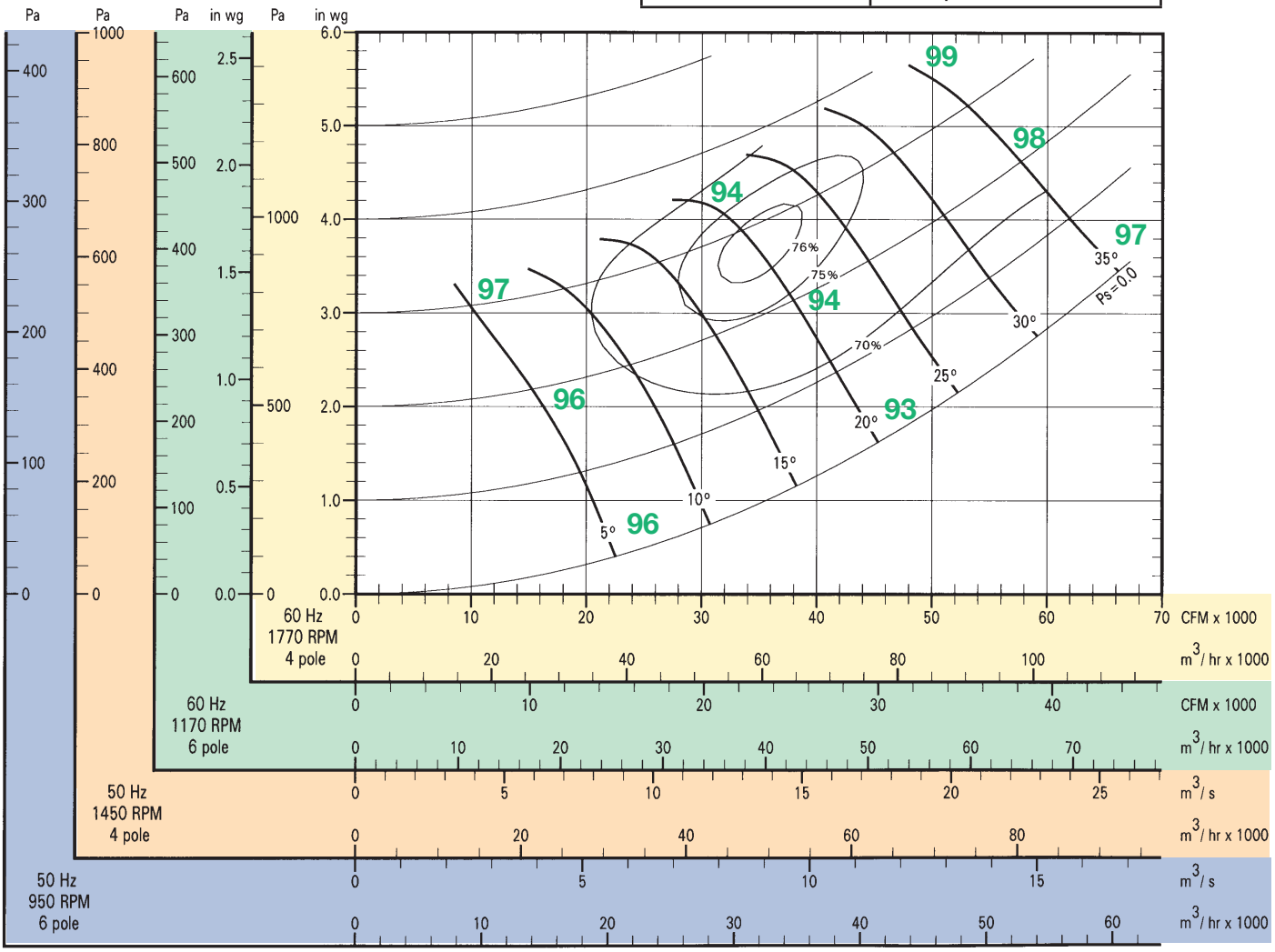
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 103-275 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 40.38 inches *(1026 mm)*	
Outlet Velocity	ft/min = cfm / 8.89
	m/s = m^3/s / 0.83
Tip Speed	ft/min = rpm X 10.6
	m/s = rpm X 3.22

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	8.58/6.40	13.8/10.3	20.0/14.9	27.3/20.3	36.1/26.9	46.8/34.9	59.8/44.6
1170 (Bhp/kW)	2.48/1.85	3.99/2.98	5.77/4.30	7.87/5.87	10.4/7.77	13.5/10.1	17.3/12.9
1450 (kW)	3.52	5.67	8.19	11.2	14.8	19.2	24.5
950 (kW)	0.99	1.59	2.30	3.14	4.16	5.40	6.90

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+10	-1.5
1170	-	-11.5
1450	+4	-7.5
950	-6	-17.5

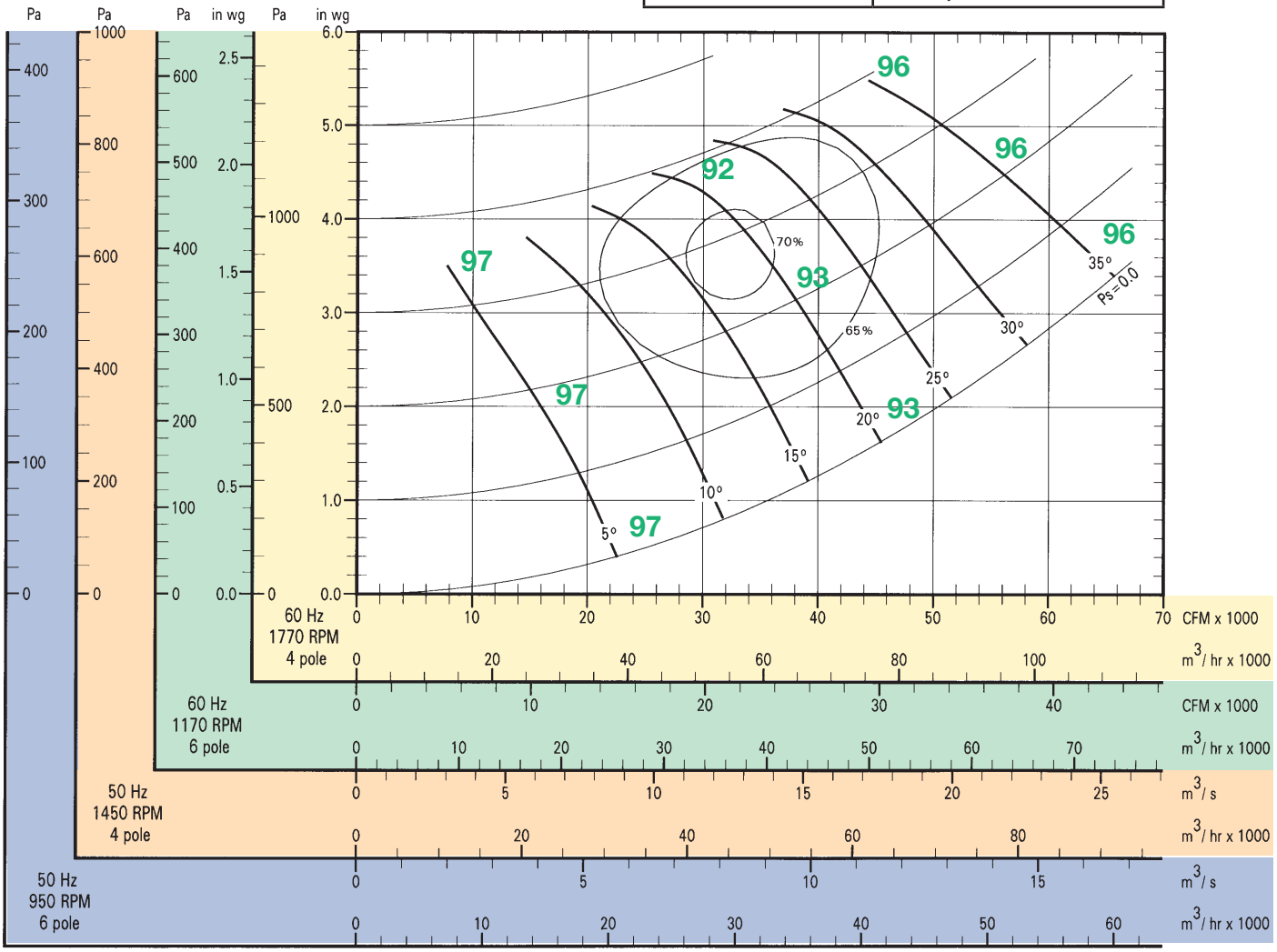
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 103-400 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 40.38 inches *(1026 mm)*	
Outlet Velocity	ft/min = cfm / 8.89
	m/s = m^3/s / 0.83
Tip Speed	ft/min = rpm X 10.6
	m/s = rpm X 3.22

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	9.66/7.20	15.6/11.7	22.2/16.6	29.7/22.1	38.7/28.9	50.4/37.6	66.6/49.7
1170 (Bhp/kW)	2.79/2.08	4.51/3.37	6.41/4.78	8.57/6.39	11.2/8.34	14.6/10.9	19.2/14.3
1450 (kW)	3.96	6.41	9.10	12.2	15.9	20.7	27.3
950 (kW)	1.11	1.80	2.56	3.42	4.46	5.81	7.68

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+10	-1.5
1170	-	-11.5
1450	+5	-6.5
950	-6	-17.5

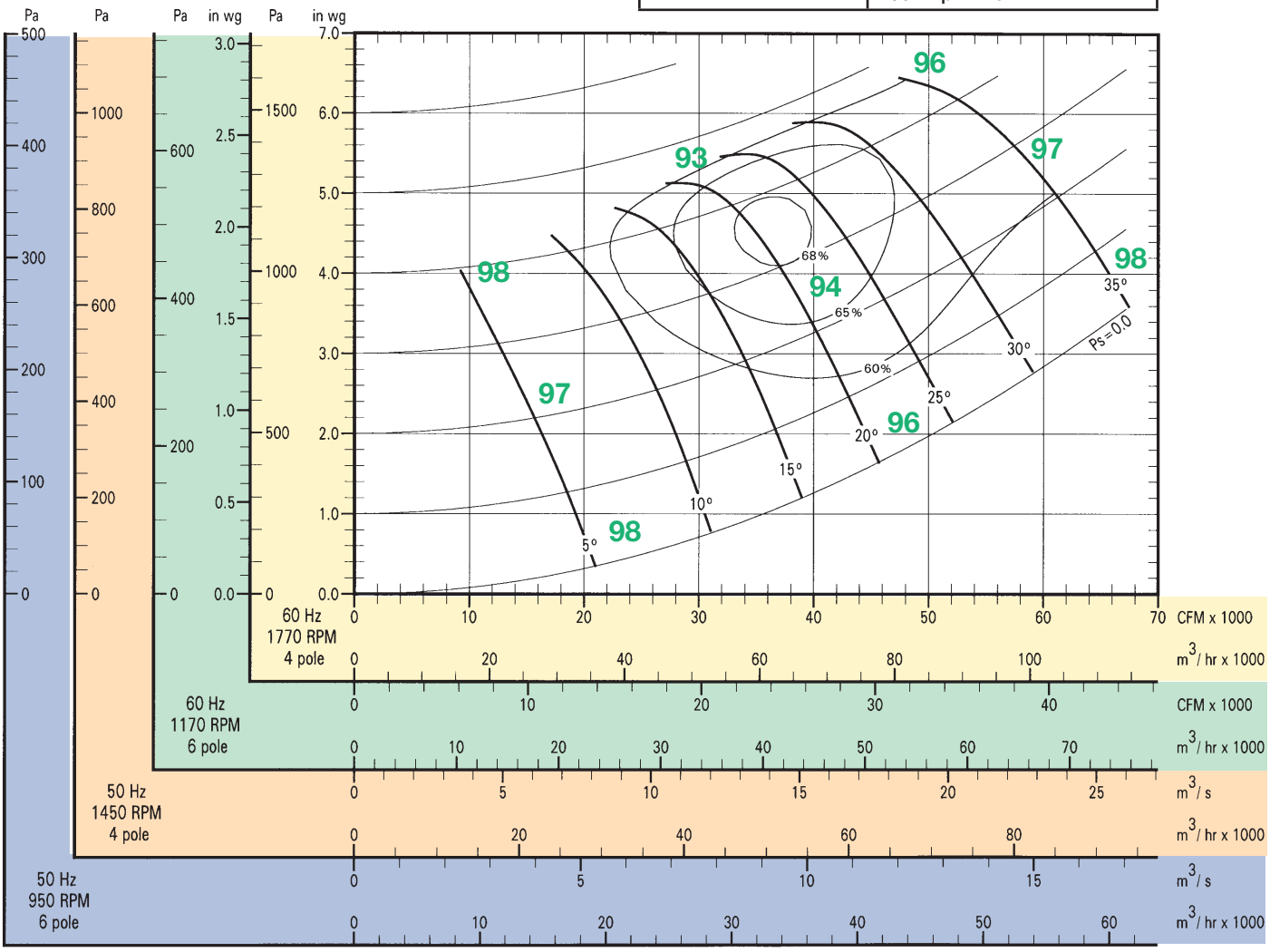
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 103-400 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 40.38 inches *(1026 mm)*	
Outlet Velocity	ft/min = cfm / 8.89
	m/s = m^3/s / 0.83
Tip Speed	ft/min = rpm X 10.6
	m/s = rpm X 3.22

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	12.8/9.51	21.9/16.3	29.7/22.2	37.8/28.2	47.6/35.5	60.8/45.3	82.1/61.2
1170 (Bhp/kW)	3.68/2.75	6.32/4.71	8.58/6.40	10.9/8.13	13.7/10.3	17.6/13.1	23.7/17.7
1450 (kW)	5.23	8.97	12.2	15.5	19.5	24.9	33.7
950 (kW)	1.47	2.52	3.43	4.35	5.49	7.01	9.47

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+5	-6.5
950	-6	-17.5

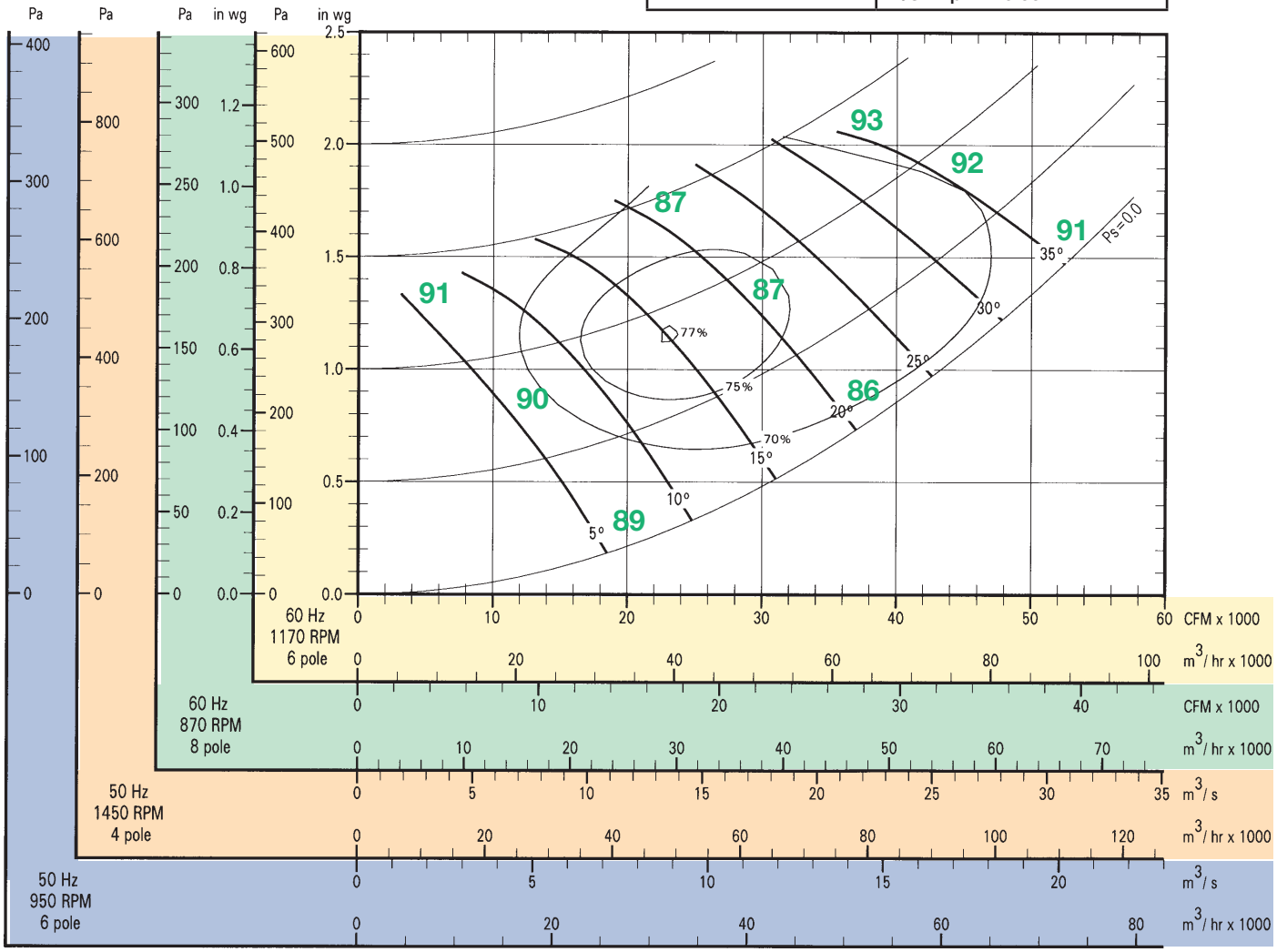
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 113-275 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 44.5 inches *(1130 mm)*	
Outlet Velocity	ft/min = cfm / 10.80
	m/s = m^3/s / 1.0
Tip Speed	ft/min = rpm X 11.7
	m/s = rpm X 3.55

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	2.28/1.70	3.56/2.65	5.50/4.11	7.99/5.96	11.0/8.17	14.3/10.7	18.2/13.6
870 (Bhp/kW)	0.94/0.70	1.46/1.09	2.26/1.69	3.28/2.45	4.50/3.36	5.90/4.40	7.49/5.59
1450 (kW)	3.24	5.05	7.81	11.3	15.6	20.4	25.9
950 (kW)	0.91	1.42	2.20	3.19	4.37	5.73	7.28

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+7	-4.5
870	-	-11.5
1450	+13	+1.5
950	+2	-9.5

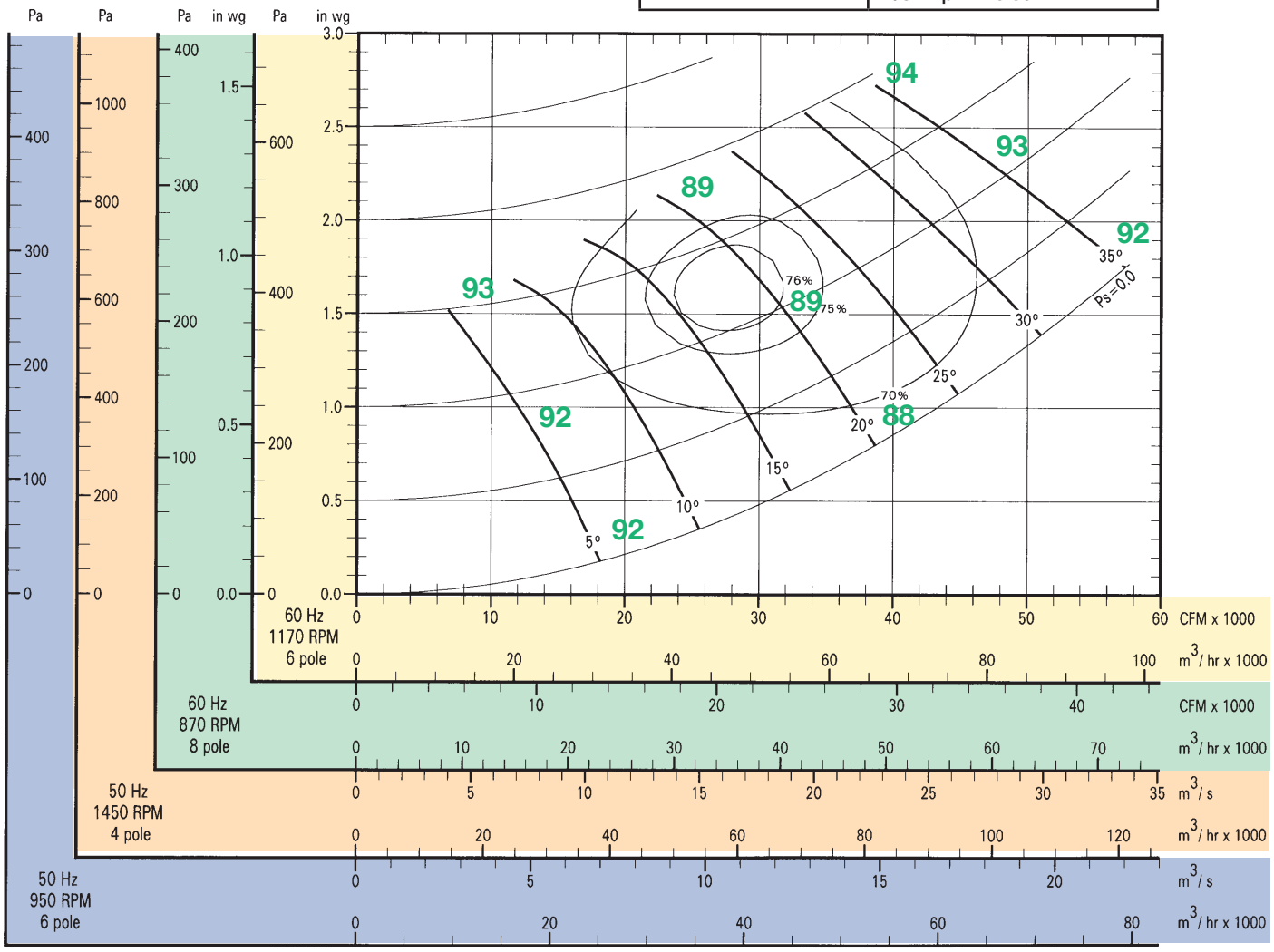
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 113-275 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 44.5 inches *(1130 mm)*	
Outlet Velocity	ft/min = cfm / 10.80
	m/s = m^3/s / 1.0
Tip Speed	ft/min = rpm X 11.7
	m/s = rpm X 3.55

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	3.29/2.46	5.09/3.80	7.67/5.72	10.8/8.09	14.6/10.9	19.0/14.2	25.2/18.8
870 (Bhp/kW)	1.35/1.01	2.09/1.56	3.15/2.35	4.46/3.33	6.01/4.48	7.81/5.83	10.3/7.71
1450 (kW)	4.68	7.22	10.9	15.4	20.8	27.0	35.7
950 (kW)	1.32	2.03	3.06	4.33	5.84	7.59	10.0

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+7	-4.5
870	-	-11.5
1450	+13	+1.5
950	+2	-9.5

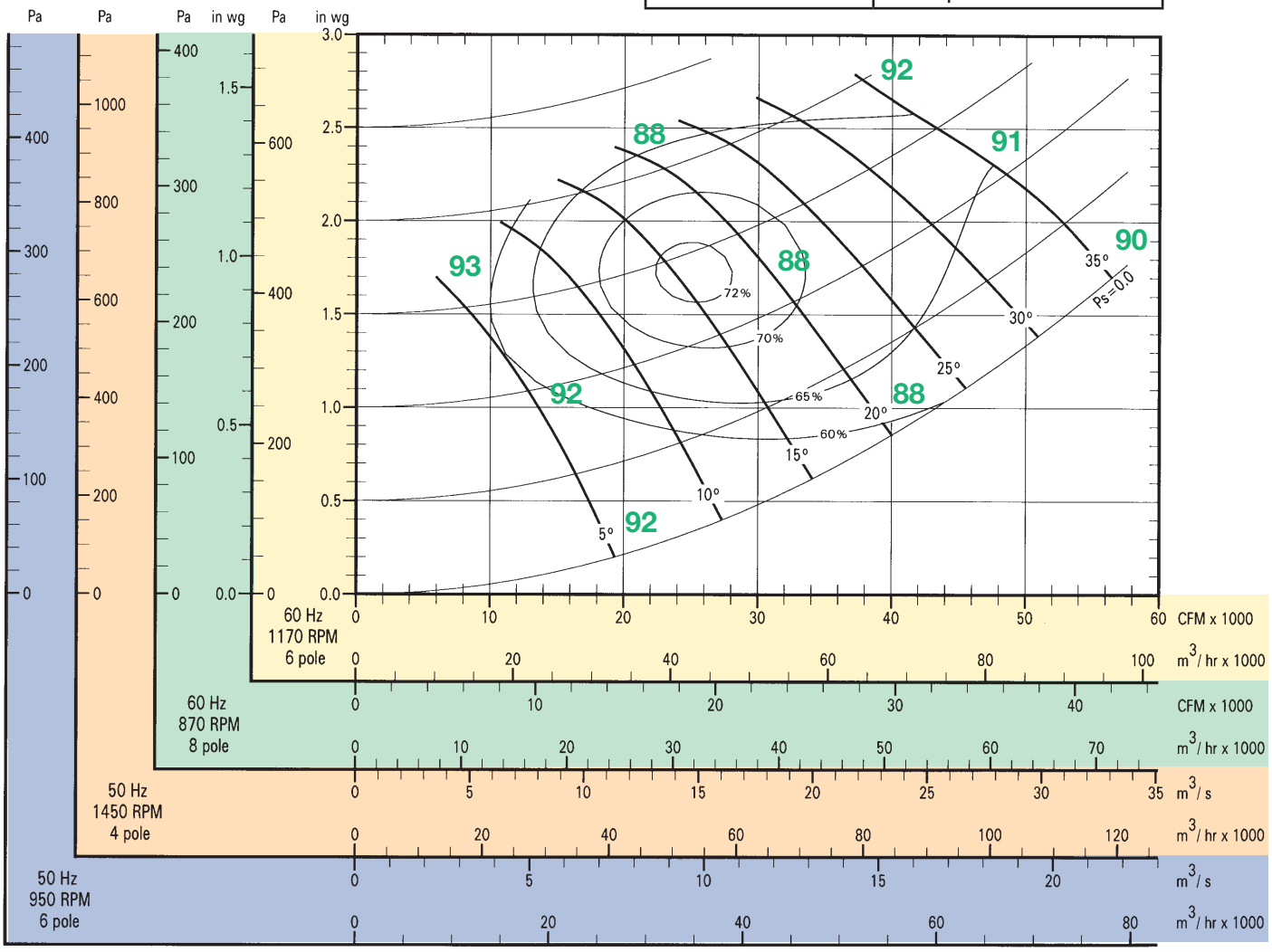
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 113-400 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 44.5 inches *(1130 mm)*	
Outlet Velocity	ft/min = cfm / 10.80
	m/s = m^3/s / 1.0
Tip Speed	ft/min = rpm X 11.7
	m/s = rpm X 3.55

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	3.78/2.82	6.23/4.65	9.00/6.72	12.2/9.11	16.0/12.0	20.7/15.4	26.6/19.8
870 (Bhp/kW)	1.55/1.16	2.56/1.91	3.70/2.76	5.02/3.74	6.60/4.92	8.51/6.35	10.9/8.15
1450 (kW)	5.37	8.84	12.8	17.3	22.8	29.4	37.8
950 (kW)	1.51	2.49	3.60	4.88	6.41	8.27	10.6

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
1170	+6	-5.5
870	-	-11.5
1450	+13	+1.5
950	+2	-9.5

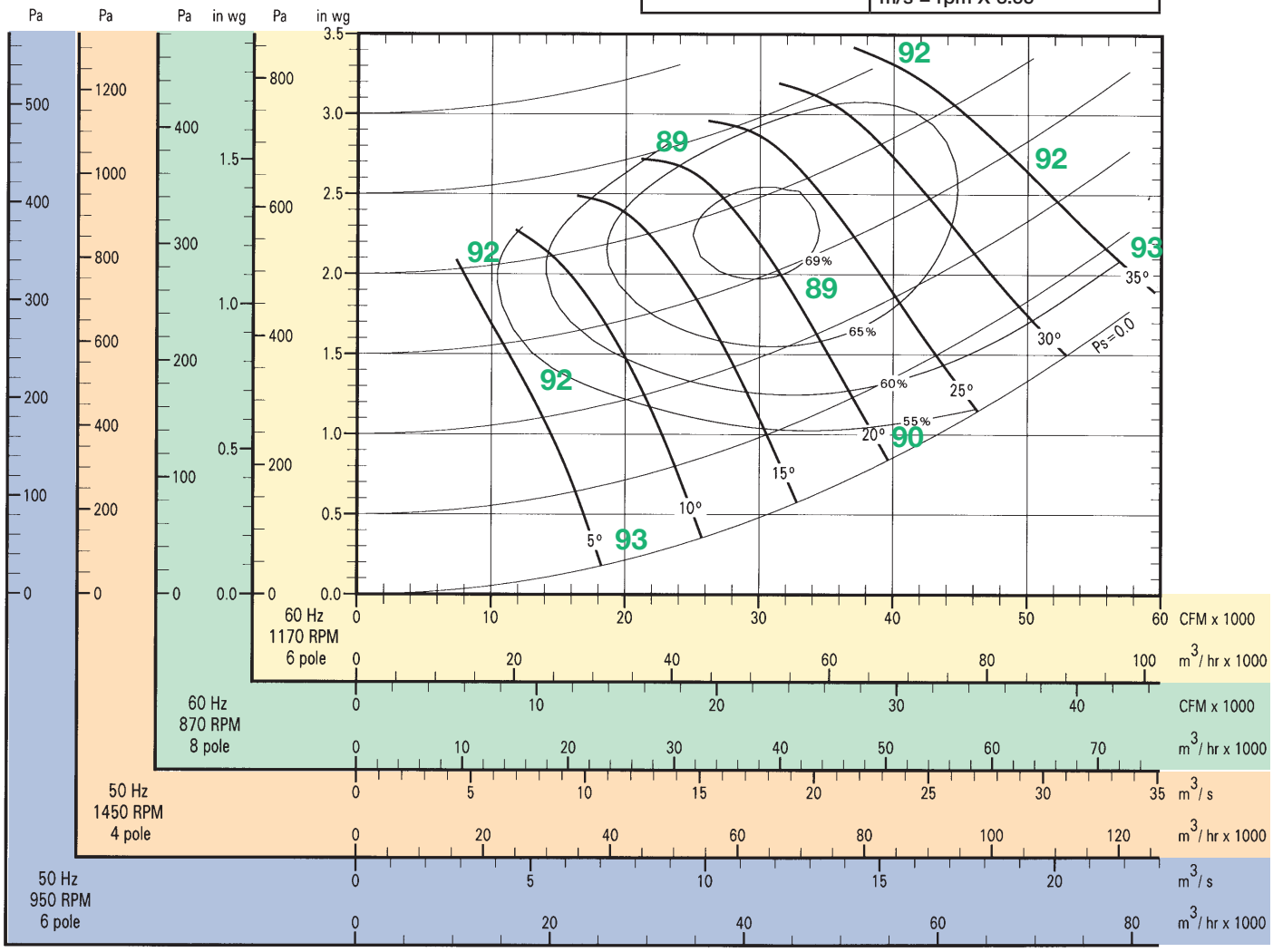
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 113-400 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 44.5 inches *(1130 mm)*	
Outlet Velocity	ft/min = cfm / 10.80
	m/s = m^3/s / 1.0
Tip Speed	ft/min = rpm X 11.7
	m/s = rpm X 3.55

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	5.02/3.74	8.01/5.97	11.5/8.54	15.6/11.6	20.5/15.3	26.3/19.6	33.3/24.8
870 (Bhp/kW)	2.06/1.54	3.29/2.46	4.71/3.51	6.40/4.77	8.42/6.28	10.8/8.07	13.7/10.2
1450 (kW)	7.12	11.4	16.3	21.1	29.1	37.4	47.3
950 (kW)	2.00	3.20	4.57	6.22	8.17	10.5	13.3

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+9	-2.5
870	-	-11.5
1450	+13	+1.5
950	+2	-9.5

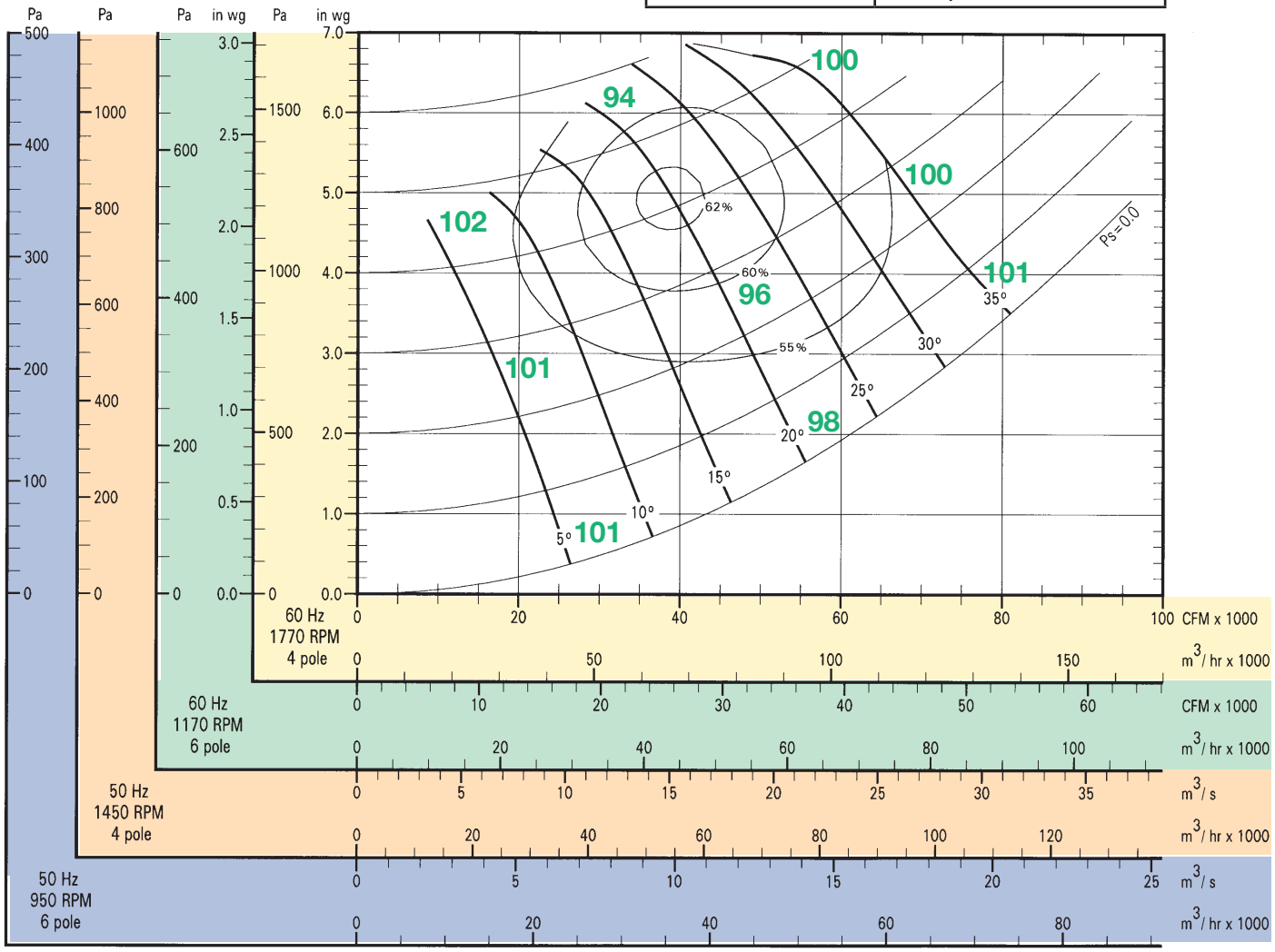
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 113-533 8 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 44.5 inches *(1130 mm)*	
Outlet Velocity	ft/min = cfm / 10.80
	m/s = m^3/s / 1.0
Tip Speed	ft/min = rpm X 11.7
	m/s = rpm X 3.55

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	16.6/12.4	26.3/19.6	37.4/27.9	49.9/37.2	64.5/48.1	81.7/60.9	103/76.7
1170 (Bhp/kW)	4.80/3.58	7.60/5.67	10.8/8.05	14.4/10.8	18.6/13.9	23.6/17.6	29.7/22.2
1450 (kW)	6.81	10.8	15.3	20.5	26.4	33.5	42.2
950 (kW)	1.92	3.03	4.31	5.75	7.43	9.42	11.9

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+5	-6.5
950	-6	-17.5

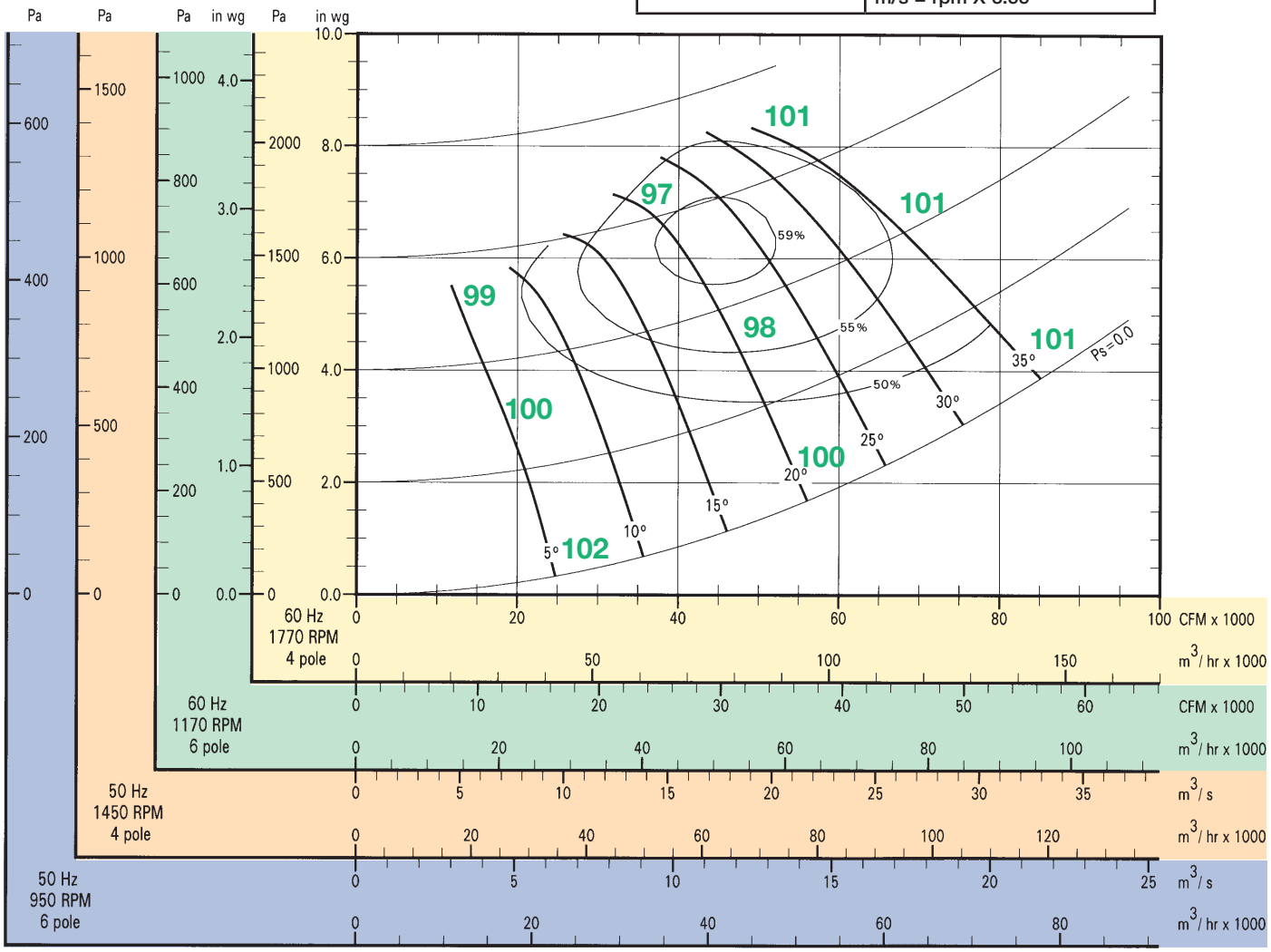
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 113-533 12 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 44.5 inches *(1130 mm)*	
Outlet Velocity	ft/min = cfm / 10.80
	m/s = m^3/s / 1.0
Tip Speed	ft/min = rpm X 11.7
	m/s = rpm X 3.55

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1770 (Bhp/kW)	23.8/17.7	36.8/27.5	51.2/38.2	67.3/50.2	85.4/63.7	106/78.9	129/96.2
1170 (Bhp/kW)	6.86/5.12	10.6/7.93	14.8/11.0	19.4/14.5	24.7/18.4	30.5/22.8	37.3/27.8
1450 (kW)	9.74	15.1	21.0	27.6	35.0	43.4	52.9
950 (kW)	2.74	4.24	5.91	7.76	9.85	12.2	14.9

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1770	+11	-0.5
1170	-	-11.5
1450	+5	-6.5
950	-6	-17.5

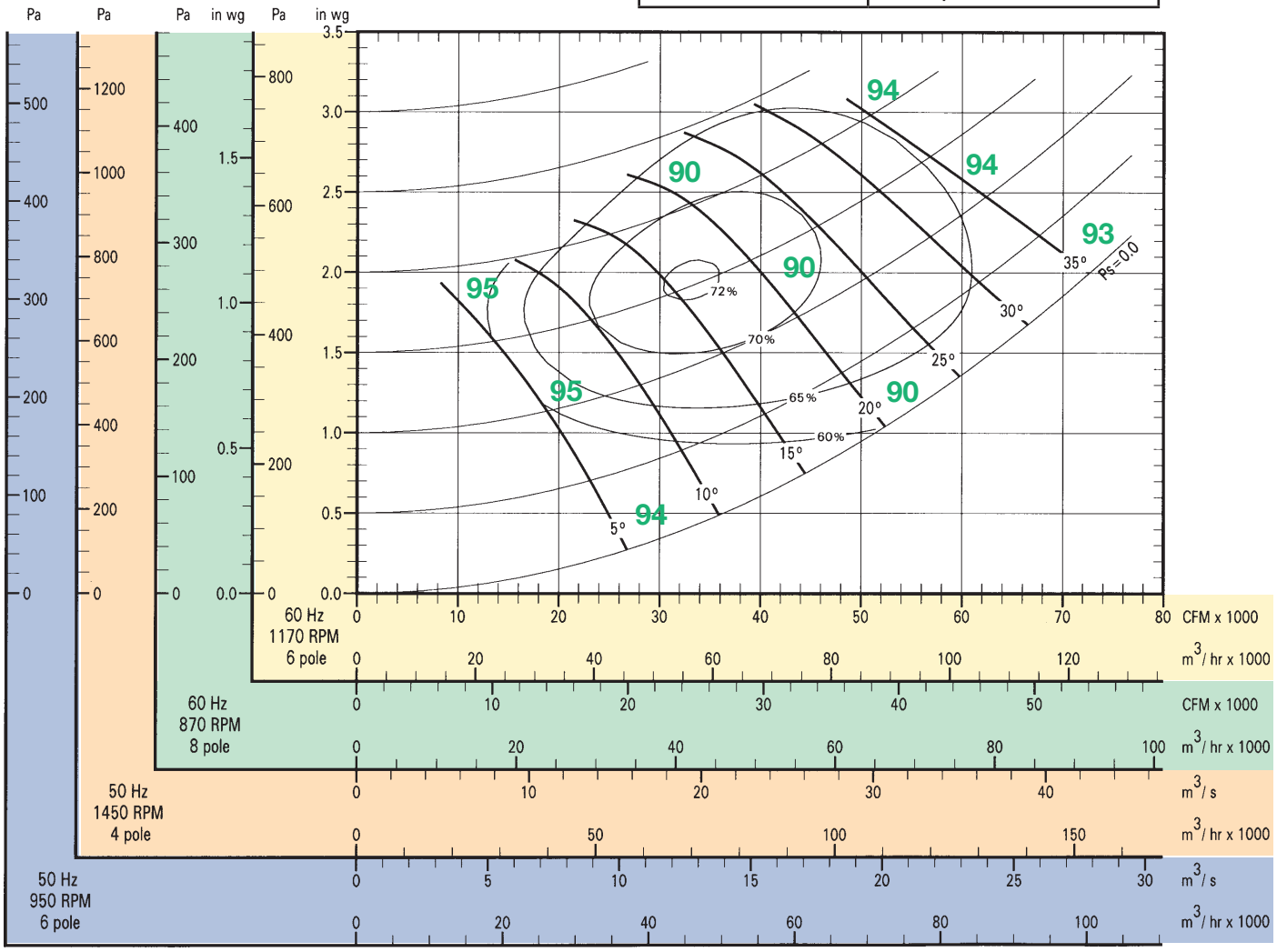
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 123-400 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 48.5 inches *(1230 mm)*	
Outlet Velocity	ft/min = cfm / 12.80
	m/s = m^3/s / 1.19
Tip Speed	ft/min = rpm X 12.7
	m/s = rpm X 3.87

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	5.66/4.22	8.89/6.63	13.0/9.70	18.0/13.4	23.8/17.7	30.4/22.7	38.2/28.5
870 (Bhp/kW)	2.33/1.74	3.66/2.73	5.34/3.99	7.39/5.51	9.78/7.29	12.5/9.33	15.7/11.7
1450 (kW)	8.04	12.6	18.5	25.5	33.8	43.2	54.2
950 (kW)	2.26	3.55	5.19	7.17	9.50	12.2	15.2

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+8	-3.5
870	-	-11.5
1450	+14	+2.5
950	+3	-8.5

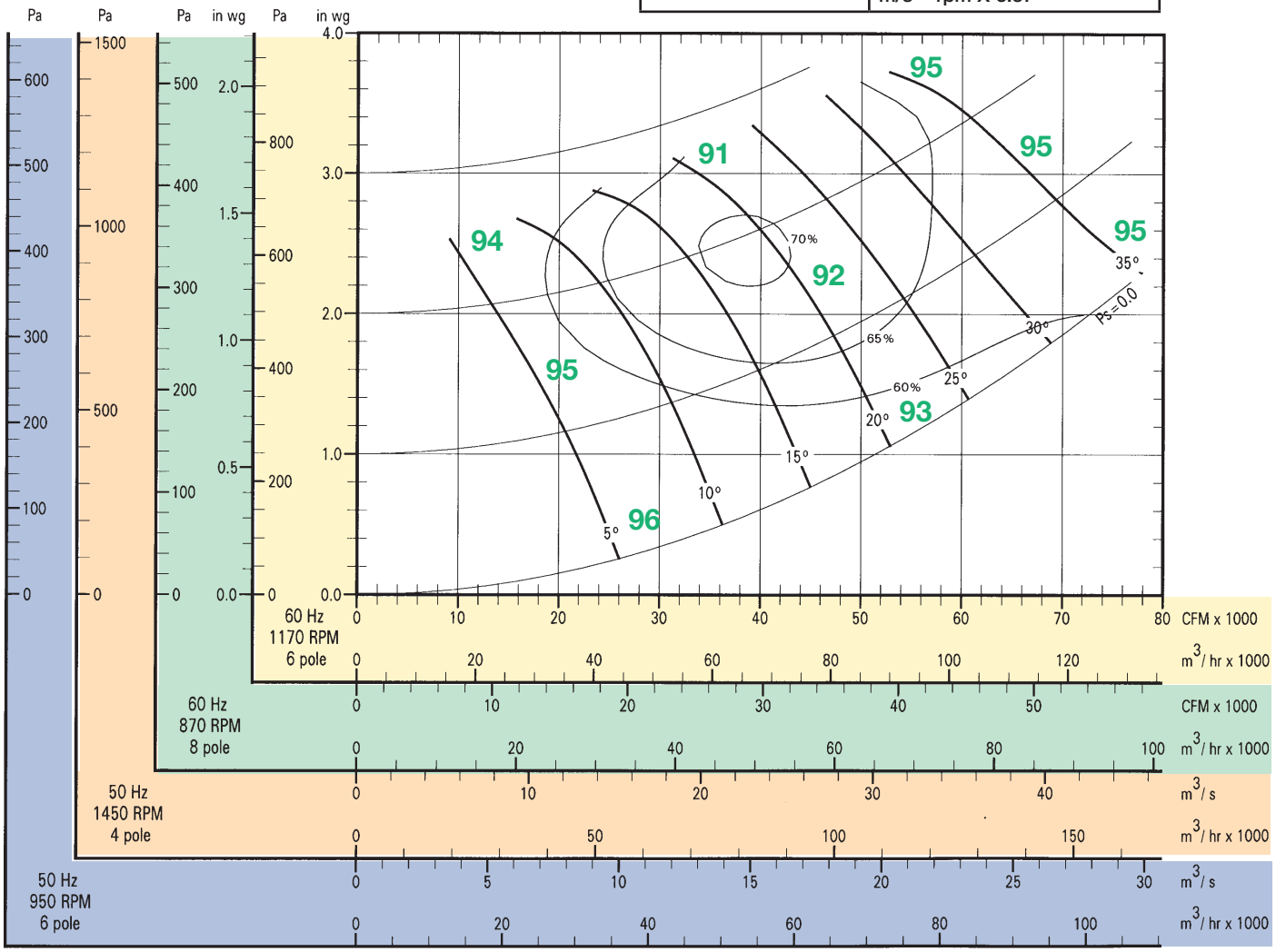
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 123-400 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 48.5 inches *(1230 mm)*	
Outlet Velocity	ft/min = cfm / 12.80
	m/s = m^3/s / 1.19
Tip Speed	ft/min = rpm X 12.7
	m/s = rpm X 3.87

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	7.85/5.86	13.0/9.72	18.1/13.5	23.8/17.8	30.8/23.0	39.3/29.4	50.5/37.7
870 (Bhp/kW)	3.23/2.41	5.36/4.00	7.45/5.56	9.79/7.30	12.7/9.44	16.2/12.1	20.8/15.5
1450 (kW)	11.2	18.5	25.7	33.8	43.7	55.9	71.7
950 (kW)	3.13	5.21	7.24	9.51	12.3	15.7	20.2

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+7	-4.5
870	-	-11.5
1450	+14	+2.5
950	+3	-8.5

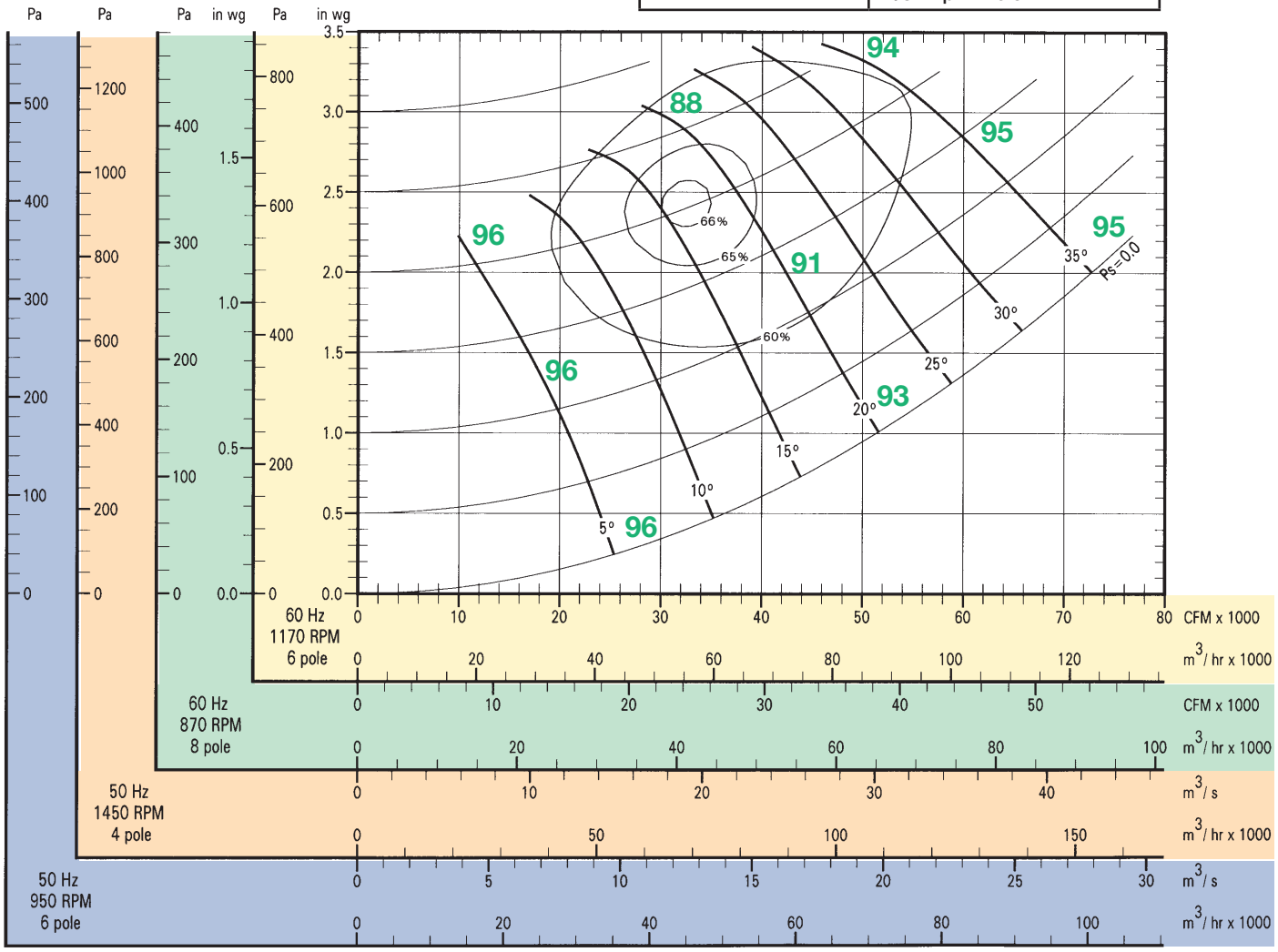
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 123-533 8 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 48.5 inches *(1230 mm)*	
Outlet Velocity	ft/min = cfm / 12.80
	m/s = m^3/s / 1.19
Tip Speed	ft/min = rpm X 12.7
	m/s = rpm X 3.87

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	7.64/5.70	12.2/9.09	17.3/12.9	23.0/17.2	29.4/21.9	36.5/27.2	45.3/33.8
870 (Bhp/kW)	3.14/2.34	5.01/3.74	7.11/5.31	9.45/7.05	12.1/9.00	15.0/11.2	18.6/13.9
1450 (kW)	10.9	17.3	24.6	32.7	41.7	51.8	64.4
950 (kW)	3.05	4.87	6.91	9.18	11.7	14.6	18.1

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+7	-4.5
870	-	-11.5
1450	+13	+1.5
950	+2	-9.5

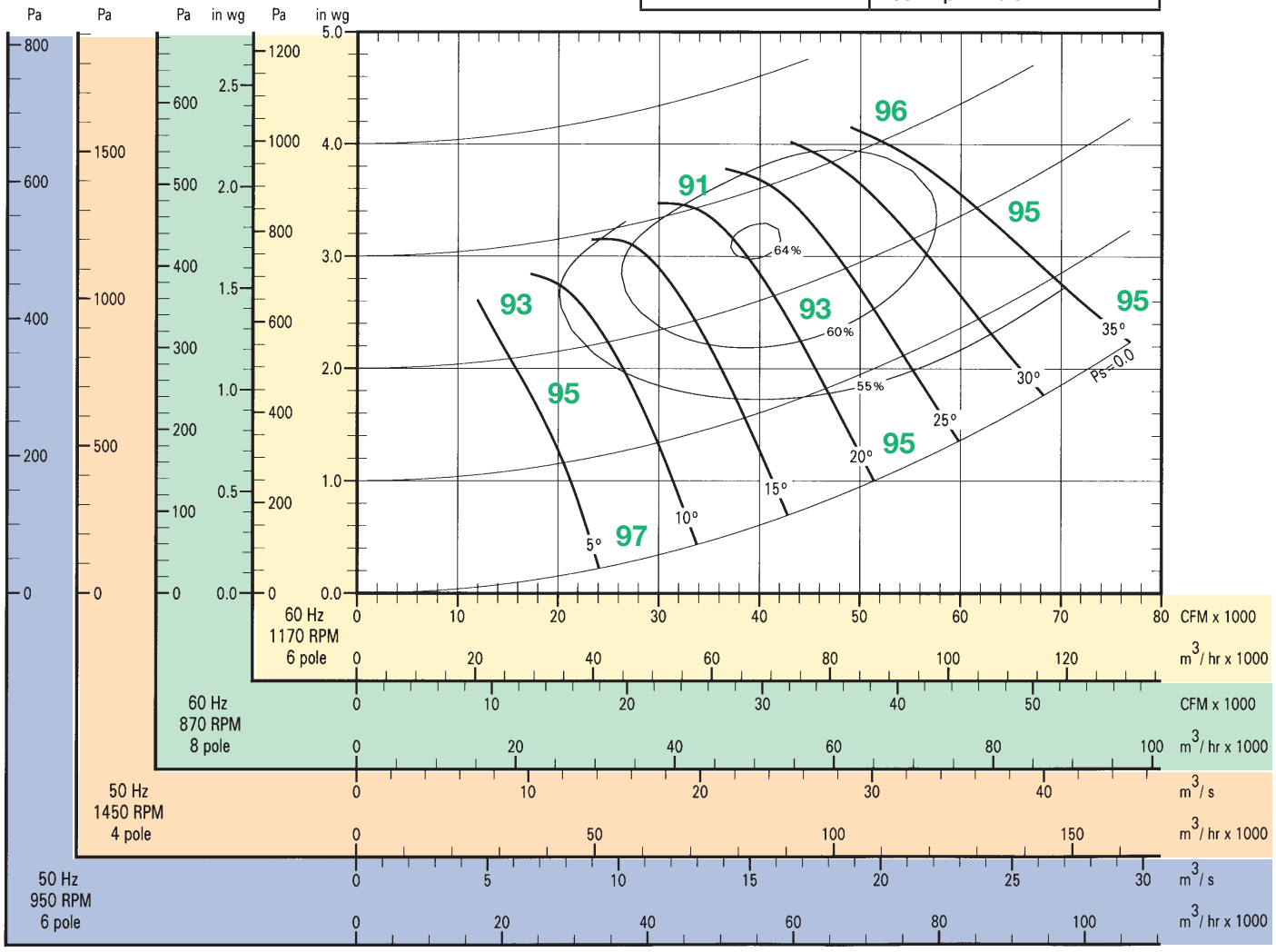
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 123-533 12 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 48.5 inches *(1230 mm)*	
Outlet Velocity	ft/min = cfm / 12.80
	m/s = m^3/s / 1.19
Tip Speed	ft/min = rpm X 12.7
	m/s = rpm X 3.87

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	10.4/7.74	15.9/11.8	22.2/16.6	29.4/22.0	37.5/28.0	46.6/34.8	56.7/42.3
870 (Bhp/kW)	4.27/3.18	6.52/4.87	9.13/6.81	12.1/9.03	15.4/11.5	19.2/14.3	23.3/17.4
1450 (kW)	14.7	22.5	31.6	41.8	53.3	66.2	80.6
950 (kW)	4.14	6.34	8.87	11.8	15.0	18.6	22.7

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+7	-4.5
870	-	-11.5
1450	+13	+1.5
950	+3	-8.5

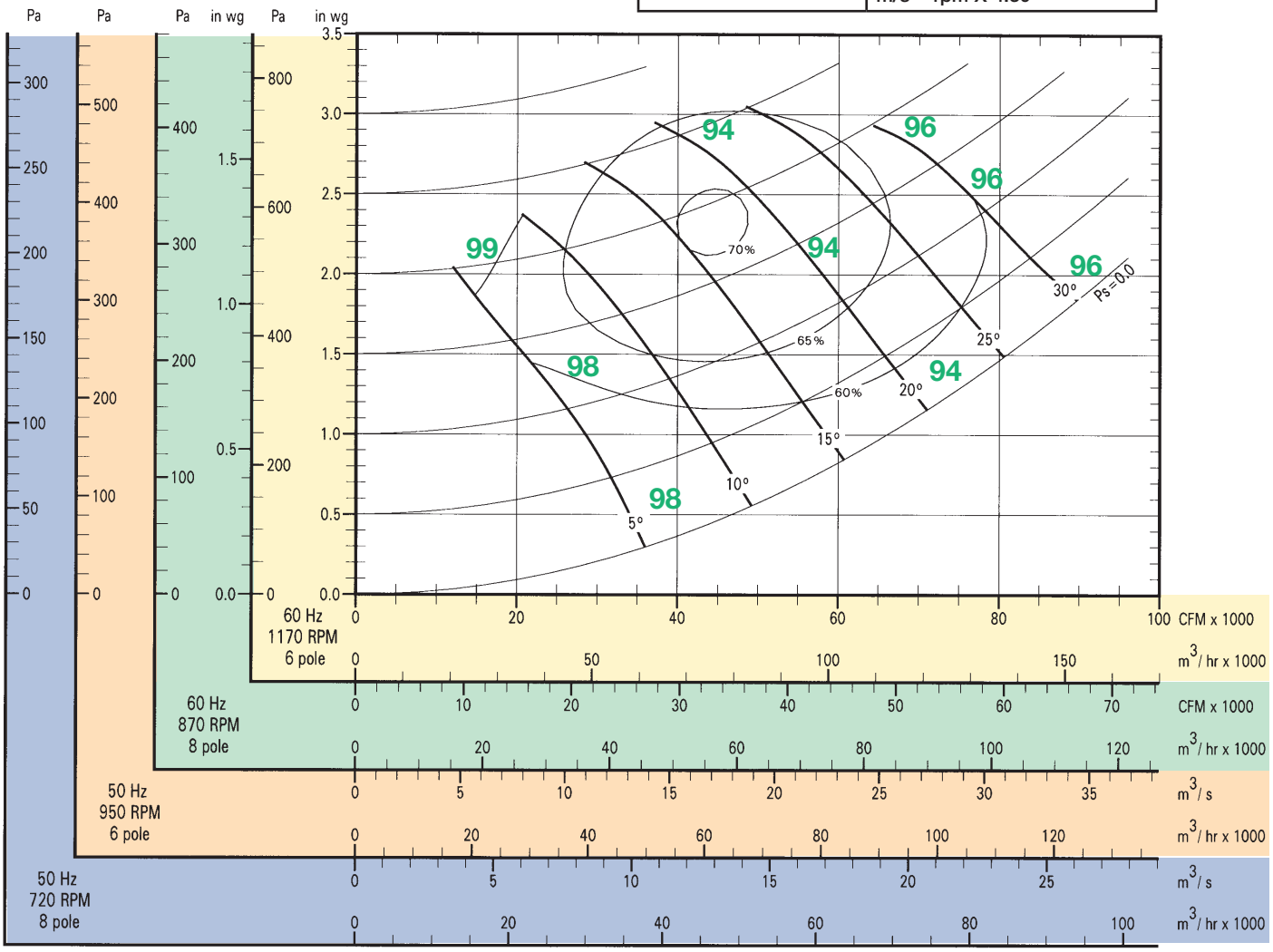
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 140-400 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 55.0 inches *(1400 mm)*	
Outlet Velocity	ft/min = cfm / 16.50
	m/s = m^3/s / 1.53
Tip Speed	ft/min = rpm X 14.4
	m/s = rpm X 4.39

Total Pressure



Volume

Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °						
rpm	5	10	15	20	25	30
1170 (Bhp/kW)	8.72/6.51	13.7/10.2	20.1/15.0	27.9/20.8	37.7/28.2	50.1/37.4
870 (Bhp/kW)	3.59/2.68	5.62/4.20	8.24/6.15	11.5/8.55	15.5/11.6	20.6/15.4
950 (kW)	3.48	5.46	8.01	11.1	15.1	20.0
720 (kW)	1.52	2.38	3.49	4.85	6.56	8.72

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+8	-3.5
870	-	-11.5
950	+2	-9.5
720	-6	-17.5

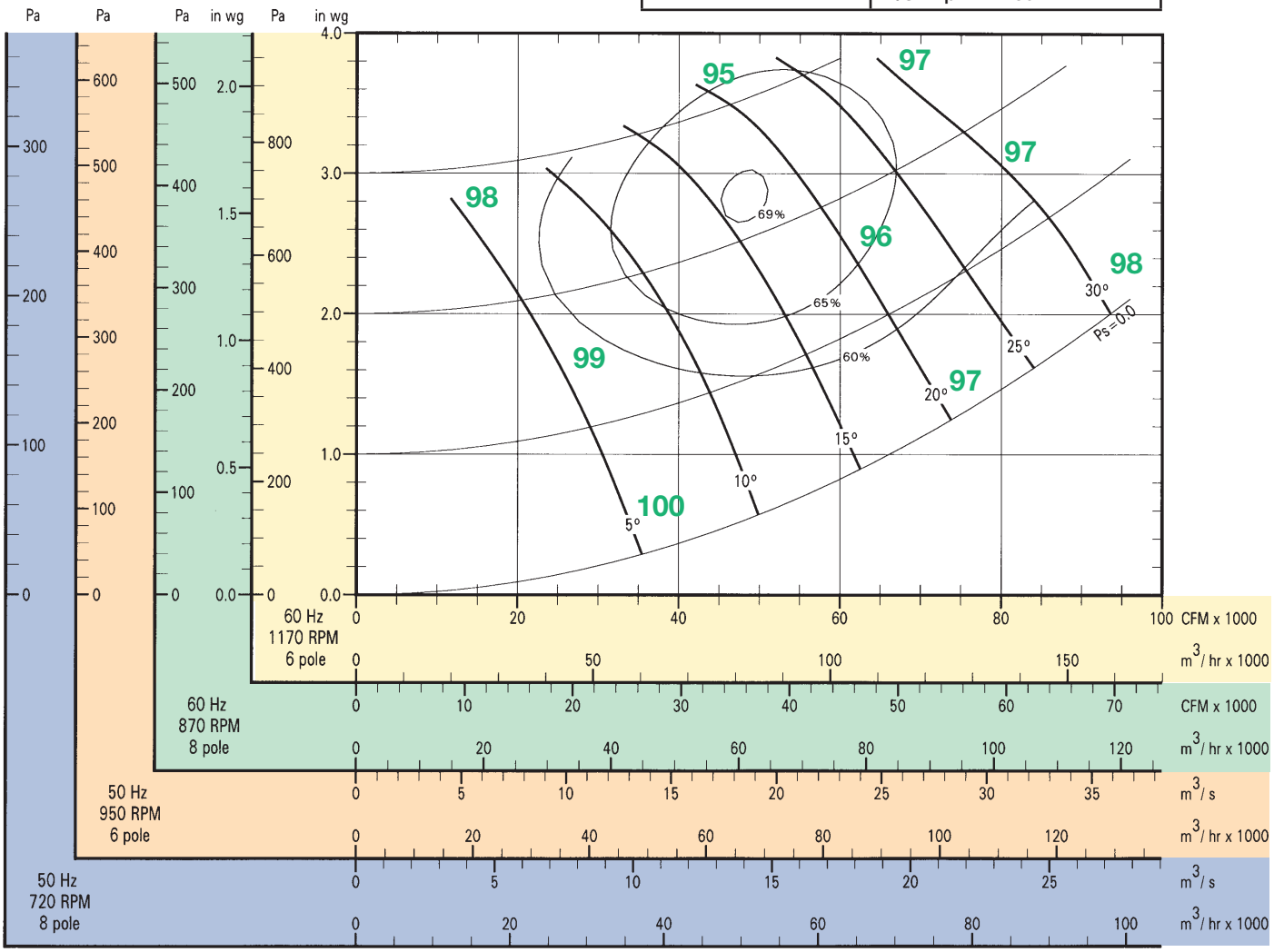
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 140-400 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 55.0 inches *(1400 mm)*	
Outlet Velocity	ft/min = cfm / 16.50
	m/s = m^3/s / 1.53
Tip Speed	ft/min = rpm X 14.4
	m/s = rpm X 4.39

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °						
rpm	5	10	15	20	25	30
1170 (Bhp/kW)	11.9/8.86	19.8/14.8	28.5/21.3	38.3/28.5	49.7/37.1	63.5/47.4
870 (Bhp/kW)	4.88/3.64	8.13/6.06	11.7/8.74	15.7/11.7	20.4/15.2	26.1/19.5
950 (kW)	4.74	7.89	11.4	15.3	19.8	25.4
720 (kW)	2.06	3.44	4.95	6.65	8.63	11.0

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+9	-2.5
870	-	-11.5
950	+2	-9.5
720	-5	-16.5

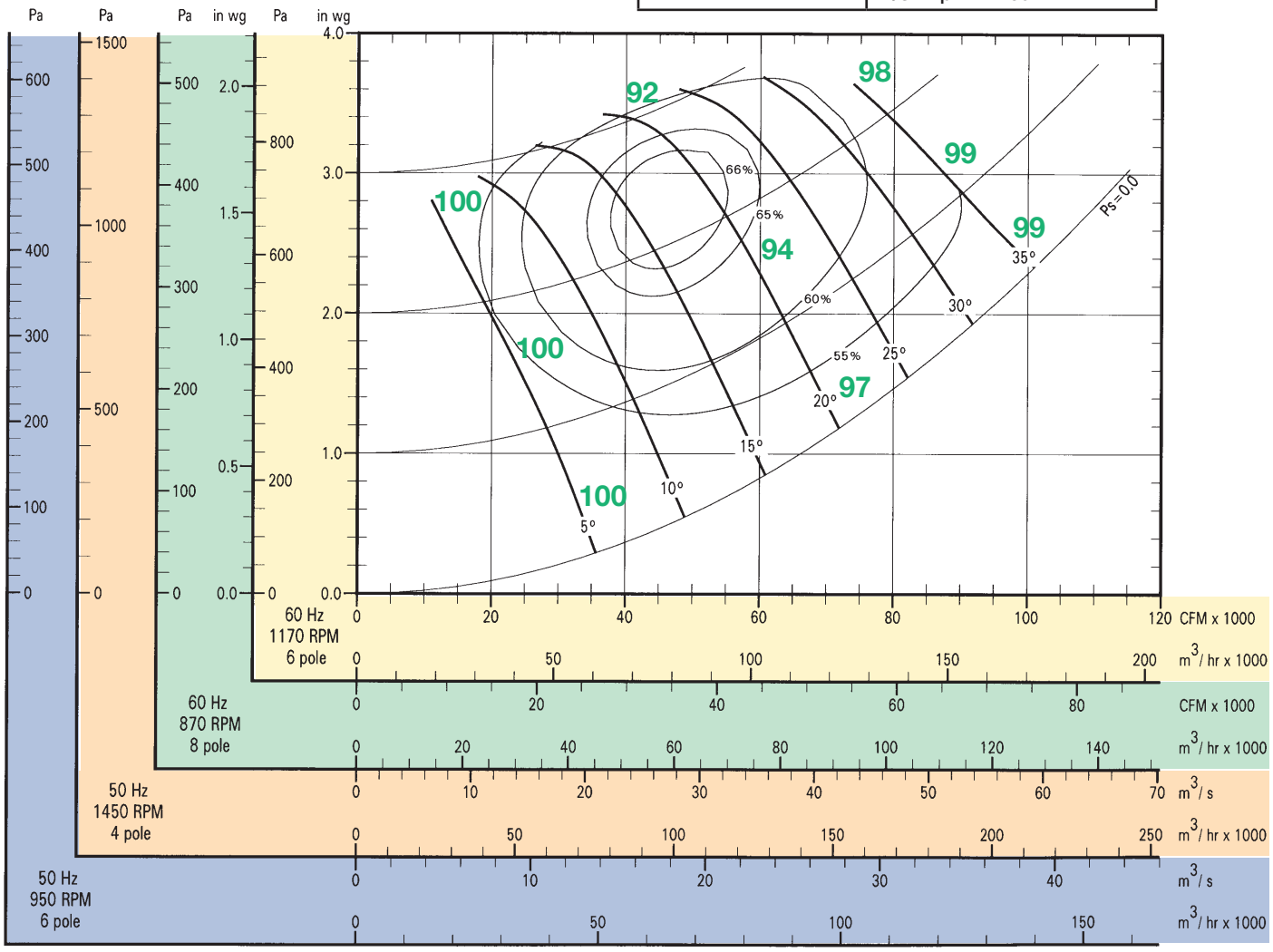
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 140-533 8 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 55.0 inches *(1400 mm)*	
Outlet Velocity	ft/min = cfm / 16.50
	m/s = m^3/s / 1.53
Tip Speed	ft/min = rpm X 14.4
	m/s = rpm X 4.39

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	11.4/8.53	18.0/13.4	26.2/19.5	35.9/26.8	47.3/35.3	60.2/44.9	74.6/55.7
870 (Bhp/kW)	4.70/3.51	7.40/5.52	10.8/8.02	14.8/11.0	19.4/14.5	24.7/18.5	30.7/22.9
1450 (kW)	16.2	25.6	37.2	51.0	67.1	85.5	106
950 (kW)	4.57	7.19	10.5	14.4	18.9	24.0	29.8

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+8	-3.5
870	-	-11.5
1450	+14	+2.5
950	+3	-8.5

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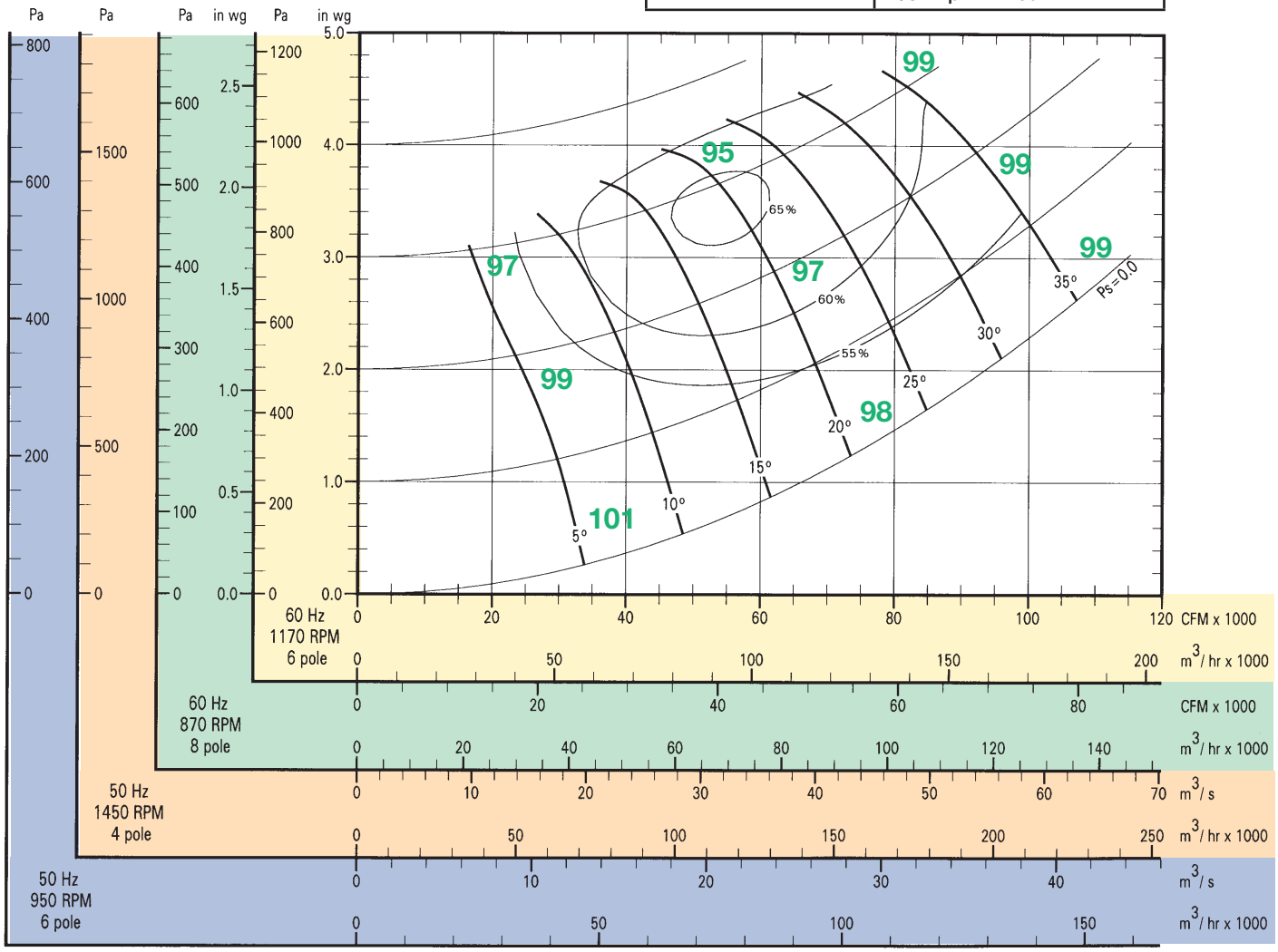
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 140-533 12 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 55.0 inches *(1400 mm)*	
Outlet Velocity	ft/min = cfm / 16.50
	m/s = m^3/s / 1.53
Tip Speed	ft/min = rpm X 14.4
	m/s = rpm X 4.39

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °							
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	16.3/12.1	25.6/19.1	36.1/26.9	48.1/35.9	62.0/46.2	77.2/57.6	98.5/73.5
870 (Bhp/kW)	6.69/4.99	10.5/7.85	14.8/11.1	19.8/14.8	25.5/19.0	31.7/23.7	40.5/30.2
1450 (kW)	23.1	36.3	51.2	68.3	88.0	110	140
950 (kW)	6.49	10.2	14.4	19.2	24.8	30.8	39.3

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+8	-3.5
870	-	-11.5
1450	+16	+4.5
950	+2	-9.5

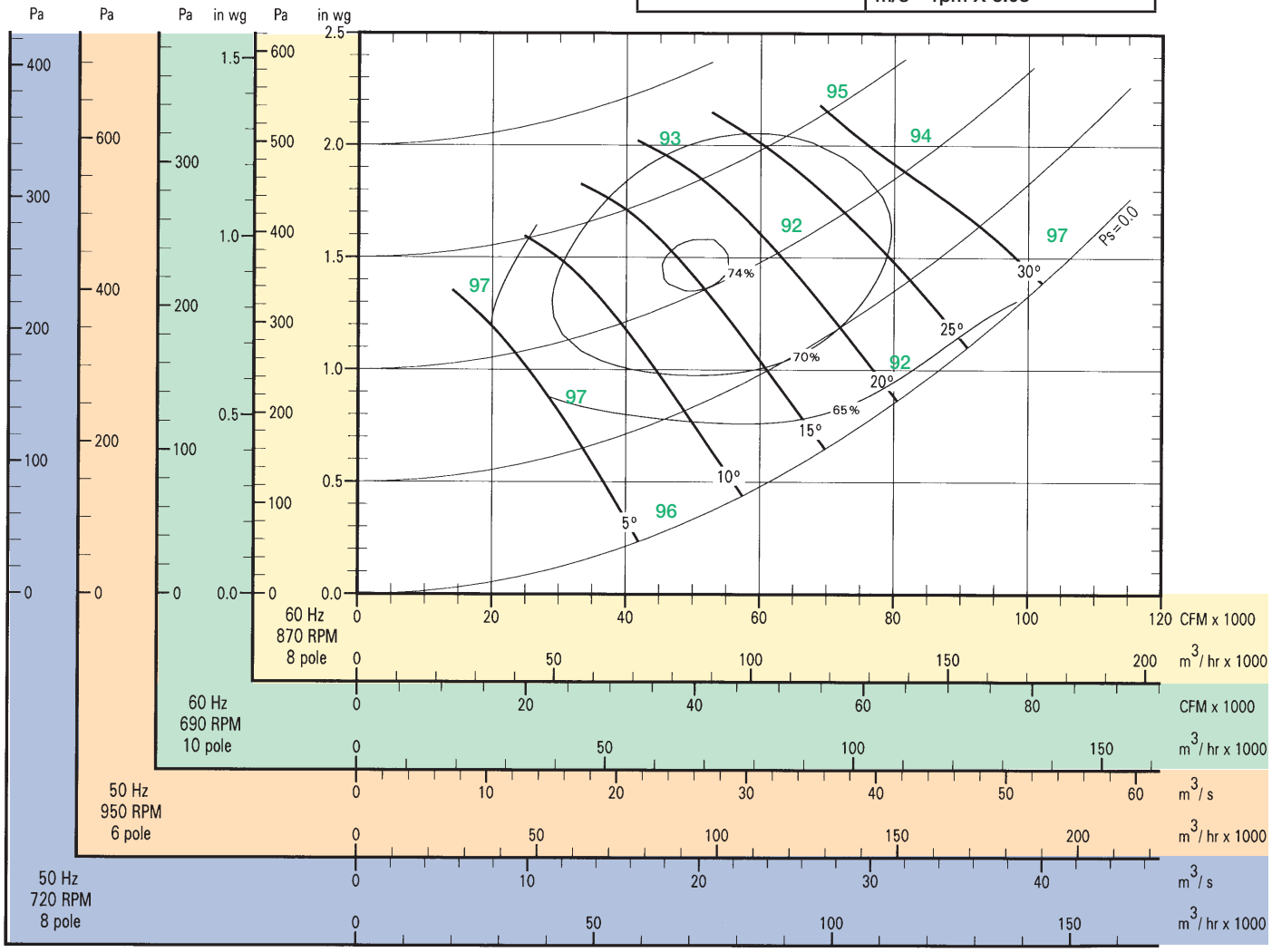
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 160-400 6 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 63.0 inches *(1600 mm)*	
Outlet Velocity	ft/min = cfm / 21.70
	m/s = m^3/s / 2.01
Tip Speed	ft/min = rpm X 16.5
	m/s = rpm X 5.03

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °					
rpm	5	10	15	20	25	30
870 (Bhp/kW)	6.01/4.48	10.3/7.70	15.2/11.3	20.8/15.5	27.3/20.4	35.5/26.5
690 (Bhp/kW)	3.00/2.24	5.15/3.84	7.56/5.64	10.4/7.72	13.6/10.2	17.7/13.2
950 (kW)	5.84	10.0	14.7	20.2	26.5	34.5
720 (kW)	2.54	4.36	6.41	8.77	11.6	15.0

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

	Inlet Sound	
rpm	LwA	dBA
870	+6	-5.5
690	-	-11.5
950	+9	-2.5
720	+1	-10.5

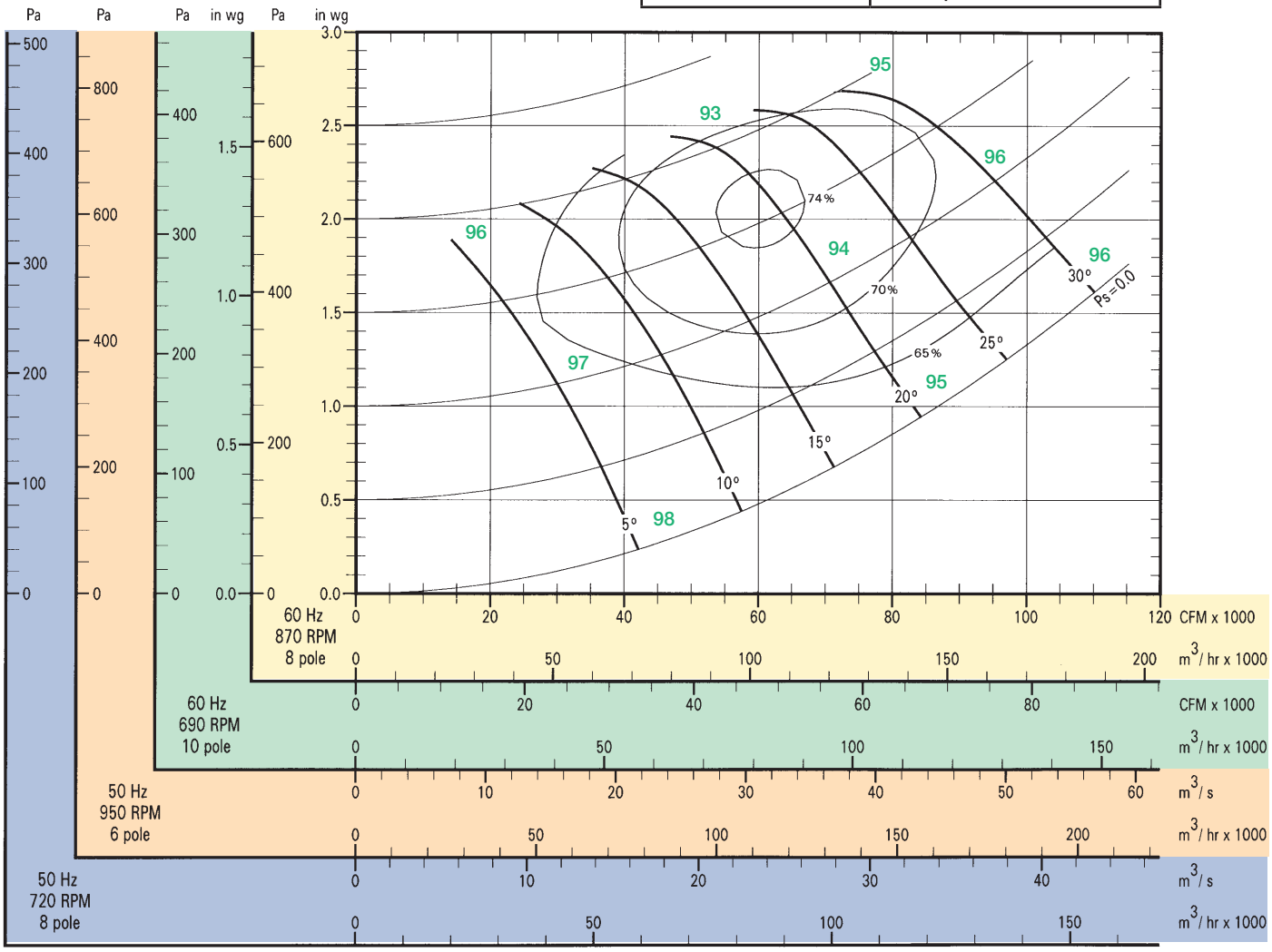
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 160-400 9 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 63.0 inches *(1600 mm)*	
Outlet Velocity	ft/min = cfm / 21.70
	m/s = m^3/s / 2.01
Tip Speed	ft/min = rpm X 16.5
	m/s = rpm X 5.03

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

Pitch Angle °						
rpm	5	10	15	20	25	30
870 (Bhp/kW)	8.55/6.38	14.4/10.8	20.6/15.4	28.0/20.9	37.2/27.7	49.2/36.7
690 (Bhp/kW)	4.27/3.18	7.20/5.37	10.3/7.67	14.0/10.4	18.5/13.8	24.5/18.3
950 (kW)	8.31	14.0	20.0	27.2	36.1	47.7
720 (kW)	3.62	6.11	8.71	11.8	15.7	20.8

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
870	+6	-5.5
690	-	-11.5
950	+8	-3.5
720	+1	-10.5

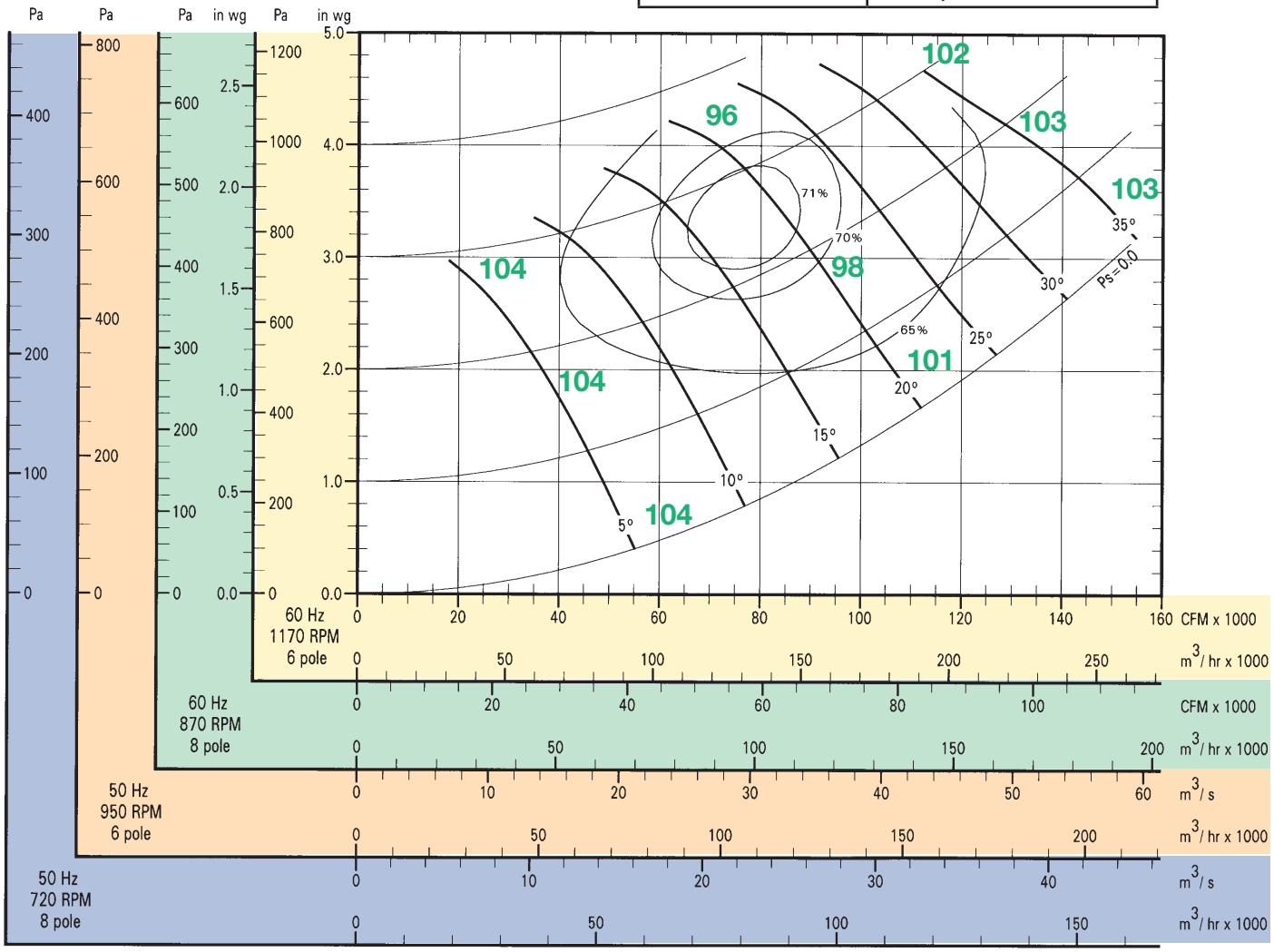
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 160-533 8 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 63.0 inches *(1600 mm)*	
Outlet Velocity	ft/min = cfm / 21.70
	m/s = m^3/s / 2.01
Tip Speed	ft/min = rpm X 16.5
	m/s = rpm X 5.03

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	19.2/14.3	32.5/24.3	47.5/35.5	64.6/48.2	83.9/62.6	106/79.3	134/100
870 (Bhp/kW)	7.90/5.90	13.4/9.98	19.5/14.6	26.5/19.8	34.5/25.7	43.7/32.6	55.3/41.2
950 (kW)	7.68	13.0	19.0	25.8	33.5	42.4	53.7
720 (kW)	3.34	5.65	8.26	11.2	14.6	18.5	23.4

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+9	-2.5
870	-	-11.5
950	+3	-8.5
720	-4	-15.5

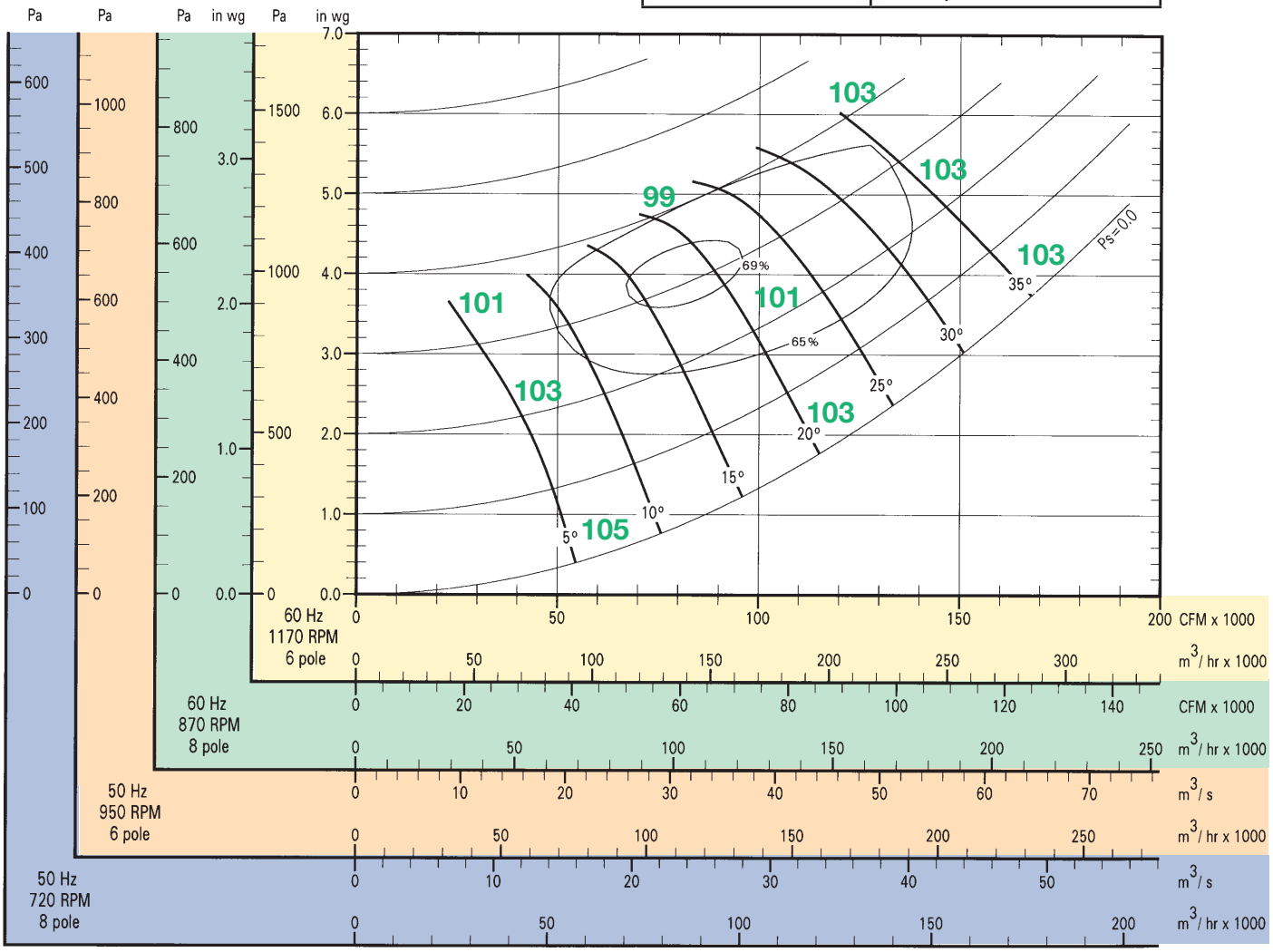
Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

AX 160-533 12 Blades

GREENHECK
Building Value in Air.

Impeller Diameter = 63.0 inches *(1600 mm)*	
Outlet Velocity	ft/min = cfm / 21.70
	m/s = m^3/s / 2.01
Tip Speed	ft/min = rpm X 16.5
	m/s = rpm X 5.03

Total Pressure



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Volume

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
1170 (Bhp/kW)	27.6/20.6	43.1/32.1	62.0/46.3	84.1/62.7	110/82.2	141/105	177/132
870 (Bhp/kW)	11.4/8.48	17.7/13.2	25.5/19.0	34.6/25.8	45.3/33.8	58.0/43.3	72.7/54.3
950 (kW)	11.0	17.2	24.8	33.6	44.0	56.3	70.6
720 (kW)	4.81	7.49	10.8	14.6	19.2	24.5	30.8

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
1170	+8	-3.5
870	-	-11.5
950	+2	-9.5
720	-5	-16.5

Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air performance ratings only.
Sound power level ratings are shown in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA sound power levels for 100%, 50% and 0% of peak pressure in Installation Type B: Free inlet, Ducted outlet. dBA sound pressure values are weighted with 11.5 dB attenuation for each octave band at 5 feet.

Selection Example and Warranty

Performance:

Volume - 0.5 m^3/s

Pressure - 170 Pa Static Pressure

Power Frequency - 50 Hz

Results:

Following the constant static pressure line a size 31 with 160 hub and 4 blades needs:

- 15 degree blade pitch setting
- 2900 rpm motor

From the chart

- The operating efficiency is between 55 and 57%

Using 2900 Motor rpm and Peak Absorbed Power Table

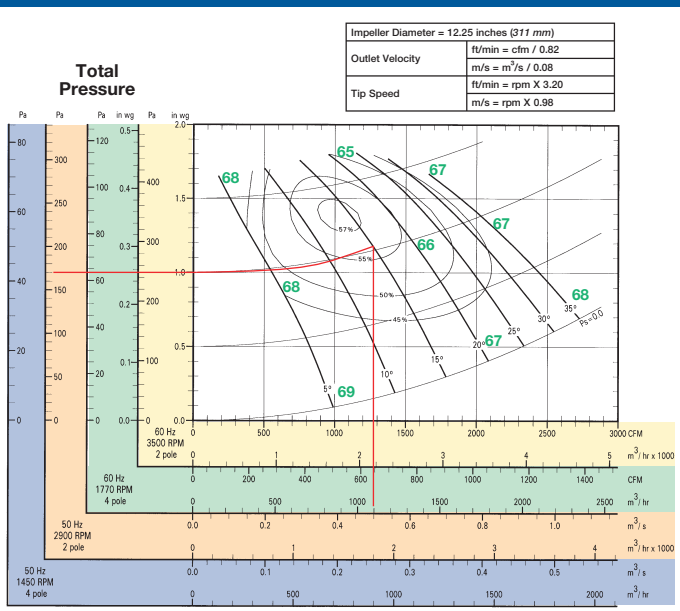
- 0.18 kW peak absorbed power

Sound power falls between 68 and 66 LwA for the color matched 1770 rpm. Using the Inlet Sound table and estimating 67 LwA with 2900 rpm, the calculated sound power and pressure are:

- Sound Power of 80 LwA
- Sound Pressure of 68.5 dBA

AX 31-160 4 Blades

GREENHECK
Building Value in Air.



Air density = 1.2 kg/m^3
Air density = 0.075 lbs/ft^3

Peak Absorbed Power [Bhp/kW (60 Hz), kW (50 Hz)]

	Pitch Angle °						
rpm	5	10	15	20	25	30	35
3500 (Bhp/kW)	0.19/0.14	0.30/0.22	0.43/0.32	0.56/0.42	0.71/0.53	0.88/0.66	1.07/0.80
1770 (Bhp/kW)	0.03/0.02	0.04/0.03	0.06/0.04	0.07/0.05	0.09/0.07	0.11/0.09	0.14/0.10
2900 (kW)	0.08	0.13	0.18	0.24	0.30	0.37	0.45
1450 (kW)	0.01	0.02	0.02	0.03	0.04	0.05	0.06

Sound Power A-Weighted [LwA]
Sound Pressure [dBA]

Inlet Sound		
rpm	LwA	dBA
3500	+20	+8.5
1770	-	-11.5
2900	+13	+1.5
1450	-5	-16.5

Performance shown is for installation Type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings

Building Value in Air

Greenheck delivers value to mechanical engineers by helping them solve virtually any air quality challenges their clients face with a comprehensive selection of top quality, innovative air-related equipment. We offer extra value to contractors by providing easy-to-install, competitively priced, reliable products that arrive on time. And building owners and occupants value the energy efficiency, low maintenance and quiet dependable operation they experience long after the construction project ends.

Our Warranty

Greenheck warrants this equipment to be free from defects in material and workmanship for a period of one year from the purchase date. Any units or parts which prove defective during the warranty period will be replaced at our option when returned to our factory, transportation prepaid. Motors are warranted by the motor manufacturer for a period of one year. Should motors furnished by Greenheck prove defective during this period, they should be returned to the nearest authorized motor service station. Greenheck will not be responsible for any removal or installation costs.

As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.

U.S. GREEN BUILDING COUNCIL MEMBER

Prepared to Support Green Building Efforts

GREENHECK®
Building Value in Air.

Supplement AX July 2004 R

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