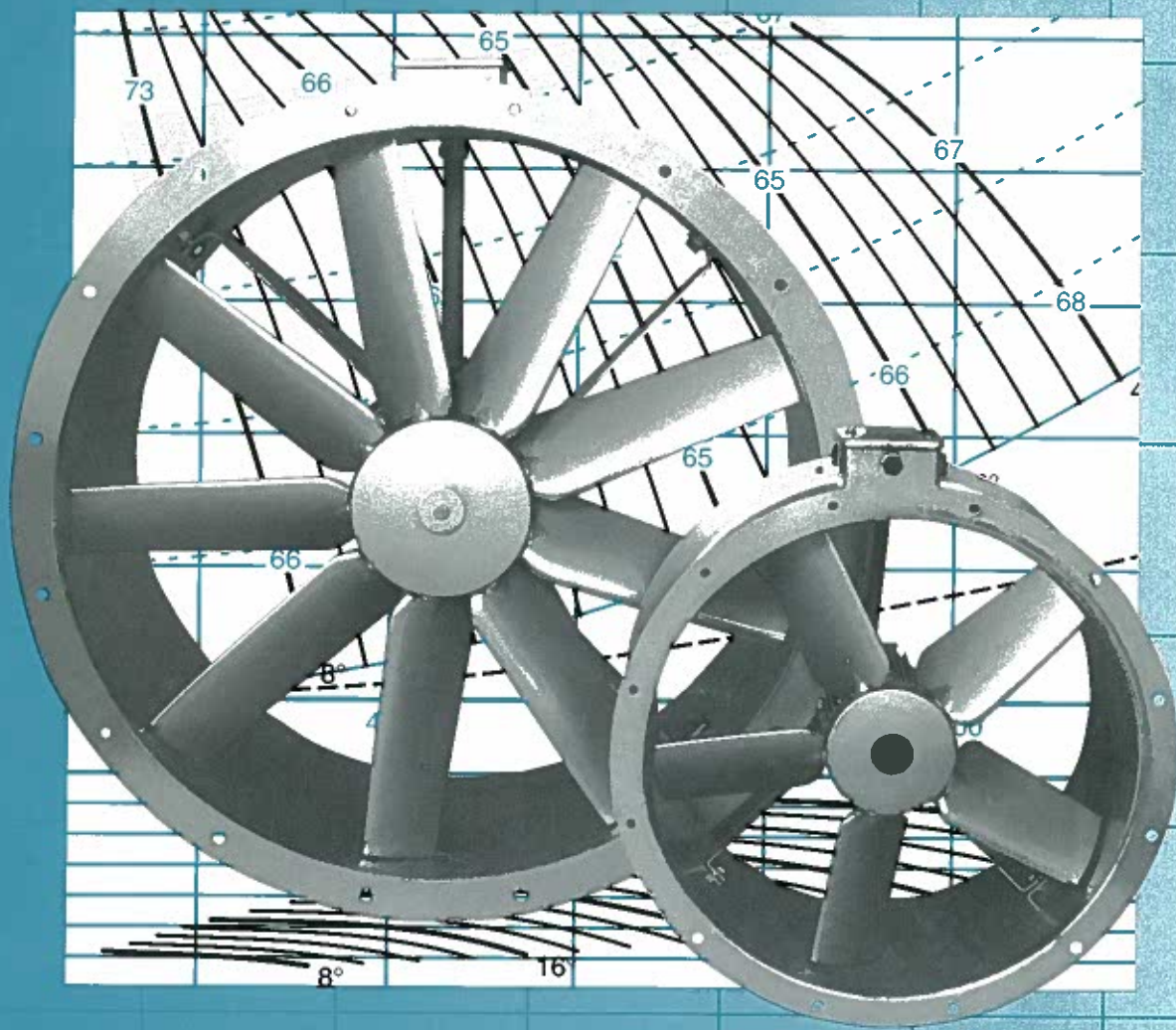


RECEIVED SEP 1 9 2000

Bulletin JMA60-99
June 1999



JMA AEROFOLIO FANS



60Hz



JM AEROFOIL Contents & Introduction



2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

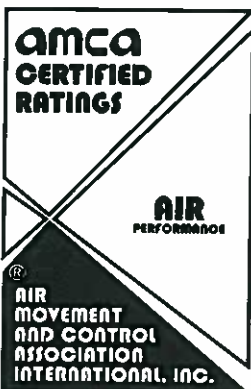
Contents	Page
Ratings and Quality Assurance	2
Features	3
Forms of Running and Mounting	4
Fan Specifications	5
How to Select a Fan	6-7
Installation Recommendations	8
Performance curves	C-1 to C-132
Dimension drawings and weights	
Fan sizes 31 through 45	9
Fan sizes 50 through 63	10
Fan sizes 71 & 80	11
Fan sizes 90 & 100	12
Fan sizes 112 & 125	13
Fan sizes 140 & 160	Back Cover

The high performance JM Aerofoil Fan

Benefits of the JM Aerofoil Fan include compactness, low cost, high efficiency and rugged design. Availability in numerous fan diameters, hub diameters, speeds and blade solidities assures a highly efficient selection for your application.



Ratings



American Fan Company certifies that the model JM Aerofoil fans shown herein are licensed to bear the AMCA Seal. The ratings shown are based on test and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

The AMCA Certified Ratings Seal applies to air performance ratings only.

Sound Levels

Extensive sound testing has proved that the JM Aerofoil axial fans have the lowest sound power levels currently available. Both inlet and outlet sound power levels are given for every fan size and speed at the design performance.

Woods in North America

Woods fans have been sold in North America since 1957. The company's U.S. marketing and manufacturing group is located at the American Fan Company, Fairfield, Ohio. Woods Canadian Sales office is located in Toronto, Ontario.

Installations

Woods fans can be found in thousands of offices, educational, medical, manufacturing and public buildings – from the Mall of America in Minneapolis and the new Boston Garden to the San Francisco Airport and McCormick Place Convention Center in Chicago.

Service

Servicing Woods installations is a cooperative effort between the Woods engineering and field service staff. Field service groups are based in both Fairfield, Ohio (USA) and Colchester, England (UK).

Sales Offices

There are over 100 sales offices in over 50 major cities throughout North America.

Quality Assurance



American Fan Company's Quality Management System is certified to ISO-9001 standards (Registration Number AQC-19201).

Motors

Motors are cast iron, pad mounted design suitable for horizontal through vertical operation. Motors are 3 phase premium efficiency totally enclosed air over design with 1.15 service factor. Standard efficiency motors are also available.

All efficiency testing and labeling is done in accordance with NEMA MG1-12.53 standard. Class F insulation with Class B rise is standard. Bearings are anti-friction grease lubricated ball or roller with 30,000 hour L-10 life minimum.

Electrical Supply and Starting

Standard motors are 3 phase/60 Hz/460V. Other voltages, 50 Hz, and 1 phase are also available.

Motors are available for across-the line, Wye-Delta, Part Winding, or Autotransformer starting.

Impellers

JM Aerofoil impellers have a unique aerodynamic blade section to optimize efficiency and performance while minimizing the noise. The thin sections obtained by high pressure die cast technique promote efficiency, strength and lower weight.

Impellers are comprised of high pressure die cast aluminium blades, hub and clampplate with fully adjustable pitch angle. All impeller components are X-ray examined to ASTM E-155 prior to machining to assure premium quality.

Impellers are precision balanced as a component and fan assembly is further balanced to minimize vibration levels.

Casings

JM fan casings are heavy gauge steel with spun flanges and continuously welded seams. They are manufactured to stringent tolerances for roundness assuring proper blade tip clearances required for optimal performance.

Non-overloading

JM Aerofoil fans have a non-overloading characteristic. The peak power input occurs within normal operating range of pressures and is always exceeded by the motor rating.

Reversal of Airflow

JM Aerofoil fans can be reversed for emergency use. Reversal is obtained by interchanging electrical connections. If frequent reversals are necessary, contact the factory. A "truly reversible" impeller can be provided where equal volume in either airflow direction is required.

Accessories

- Motor and Impeller side guards
- Mounting Feet
- Horizontal or vertical suspension clips
- Companion Flanges.
- Flexible Connectors.
- Backdraft Dampers.
- Inlet Bells.
- Vibration Isolators.
- Outlet Cones, Silencers and Acoustical Diffusers

Finish

Parts are cleaned, primed and then finish painted with a premium grade enamel. Hot dipped galvanized, epoxy and other coatings are also available.

JM AEROFOIL

Forms of Running & Mounting



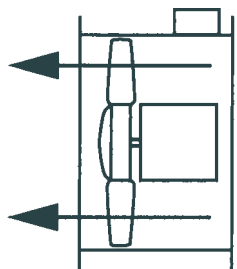
2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

The direction of airflow through the fan and the fan mounting position are defined as the "Form of running".

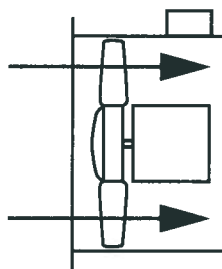
On each chart is shown the standard Form(s) of running for that particular fan, when mounted horizontally. For vertical operation add suffix "U" for airflow up, or suffix "D" for airflow down.

The standard Form of running offered will be Form B. When an alternative is available: see chart information, please request when the fan is ordered. Form of running is especially relevant when weatherproofed motors are required.

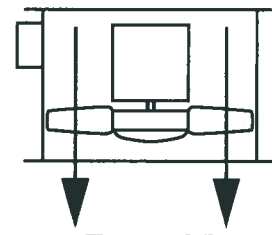
Arrows indicating correct rotation and direction of airflow are incorporated in the duct nameplate.



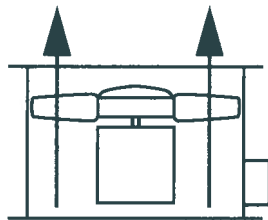
Form A



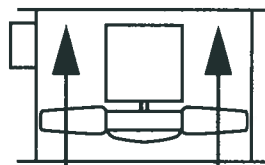
**Form B
(STANDARD)**



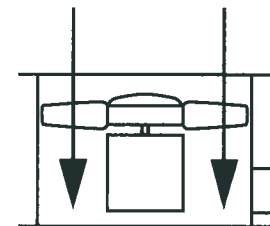
Form AD



Form AU



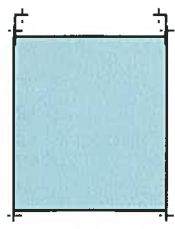
Form BU



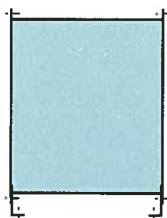
Form BD

Mounting

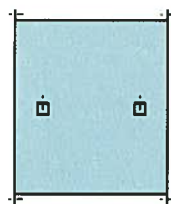
Horizontal- JM Aerofoil fans may be floor or ceiling mounted with optional mounting feet. They may also be ceiling suspended with optional horizontal suspension clips.



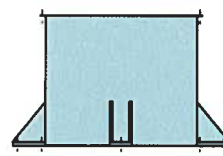
Mounting feet for ceiling suspension



Mounting feet for floor mounting



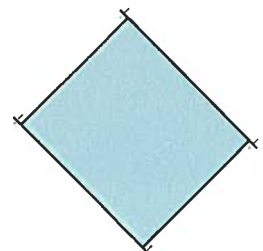
Horizontal angle suspension clips



Vertical suspension clips

Vertical- JM Aerofoil fans may be mounted for vertical up or down airflow. Optional vertical mounting clips are available.

Angular- JM Aerofoil fans may be angular mounted at any position. For special mounting clip arrangement, contact factory.



- 1. Fans** shall be manufactured by American Fan/Woods USA. Fan casings shall be made of heavy gauge steel with spun flanges and continuously welded seams. They shall be manufactured to stringent tolerance for roundness to assure proper blade tip clearance for optimal performance.
- 2. Motors** shall be cast iron frame, pad-mounted design suitable for horizontal through vertical operation. Motors shall be 3 phase premium efficiency (or 1 phase standard efficiency) totally enclosed air over design with 1.15 service factor. All motor efficiency testing and labeling shall be done in accordance with NEMA MG1-12.53 standard. Insulation shall be class F with class B rise. Bearings shall be grease lubricated anti-friction ball or roller type with 30,000 hours L-10 life minimum.
- 3. Impeller** shall consist of high pressure die cast aluminum airfoil blades, hub, and clampplate with fully adjustable blade pitch angle. All impeller components are to be X-ray examined to ASTM E-155 prior to machining to assure casting integrity and quality. Impellers shall be precision balanced as a component and then further balanced as a fan assembly to minimize vibration levels and assure smooth operation.
- 4. Motor** supports shall be heavy gauge steel and bolted to the fan casing and the motor to assure the concentricity of the motor to the fan casing.
- 5. Finish** of fan assembly shall consist of high-pressure cleaning, application of 1 coat of primer and 1 coat of enamel paint. Dry film thickness (DFT) shall be 2.5 mils minimum.
- 6. Fans shall be licensed to bear the AMCA Seal.** Ratings shall be based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.
- 7. Fan manufacturer shall be certified to ISO 9001** quality system standards.

Also Available...

JM Aerofoil Fans for Building Fire Safety / Smoke Exhaust

In any building, fire smoke can be the major killer. In the event of fire in densely populated buildings, such as schools, office buildings, department stores, shopping malls, sports arenas, and hotels, rapid, efficient smoke evacuation is vital to safe escape and minimization of damage.

American Fan/Woods USA has built and thoroughly tested JM Aerofoil fans specifically for this application. Fans are typically rated for 250 degrees C (482 degrees F) for one hour or 200 degrees C (392 degrees F) for two hours. Higher temperature ratings are available.

Fans for smoke exhaust can be provided for either duct mounting or as a roof mounted exhaust fan. Contact your local American Fan/Woods USA sales representative or the factory for more information.



JM AEROFOIL

How to select a fan



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Procedure

1. Guide to fan performance curves

The fan performance curves are arranged in order of fan diameter, starting at 315mm (12.4"), up to 1120mm (44.1") diameter. For each fan diameter, they are arranged by speed, hub diameter, and number of blades.

Note: When attempting to make a fan selection, it will become obvious that, in most cases, several different fans will perform the required duty. The final fan selection should be based on the most critical factor(s) to the application, such as:

- Volume and pressure
- Fan diameter
- Power consumption (annual operating cost)
- Sound levels
- Initial cost

2. Required duty

Establish the volume flow (Q_v) and the total pressure (pt) or static pressure (p_s) of an individual fan at standard air density (.075 lbs. per cubic foot).

3. Selection on individual fan performance curve charts

Plot the duty on the selected fan performance curve chart(s) to establish blade pitch angle, sound level, brakehorsepower, and motor size and rating.

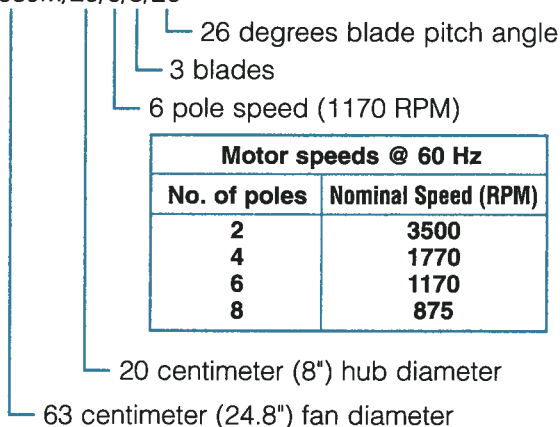
Selection Example

D Duty point required at standard air density .075 lbs. per cubic foot:

- Volume flow, $Q_v = 6000$ CFM (cubic feet per minute)
- Total pressure, $p_t = 0.5$ (inches water gauge)
- or** Static pressure, $p_s = 0.3$ (inches water gauge)

Selection:

Fan code: 63JM/20/6/3/26



4 Brakehorsepower at required duty at 26 degrees blade pitch angle=0.7
 A 3/4 HP motor can be selected or you may prefer to select a 1 HP motor if performance requirements may increase in the future.

5 Overall inlet sound power level = 86 Lw (interpolated from surrounding levels).

6 In the example, the fan will have an open inlet to atmosphere, and a ducted discharge. Therefore, use sound level corrections for "Inlet Levels" at 24-36 degrees. Duty point is below the gray shaded area on the fan performance curve so use the bottom row of numbers:

Freq.	63	125	250	500	1k	2k	4k	8k (Hz)
Lw	86	86	86	86	86	86	86	86
	-1	-10	-11	-17	-20	-22	-26	-29
dB	85	76	75	69	66	64	60	57

7 Correcting for open inlet (End Reflection Correction):

	-8	-4	-1	0	0	0	0	0
dB	77	72	74	69	66	64	60	57
	Fan Sound Power Level							

Selection Summary:

Fan code: 63JM/20/6/3/26

Motor: 3/4 HP, 1170 RPM, 3 phase, 60 Hz, 460 Volt

Inlet sound power levels:

Freq.	63	125	250	500	1k	2k	4k	8k (Hz)
dB	77	72	74	69	66	64	60	57

Ordering the fan(s):

Example:

Fan code: 63JM/20/6/3/26

Motor: 3/4 HP, 1170 RPM, 3 phase, 60 Hz, 460 Volt, TEAO enclosure, 143P frame

Quantity: 3

Fan duty: 6000 CFM @ 0.5" total pressure @ 0.7 BHP

Accessories: Mounting feet

Inlet bell

Inlet screen

RIS vibration isolators

Outlet flex connector assembly



JM AEROFOIL

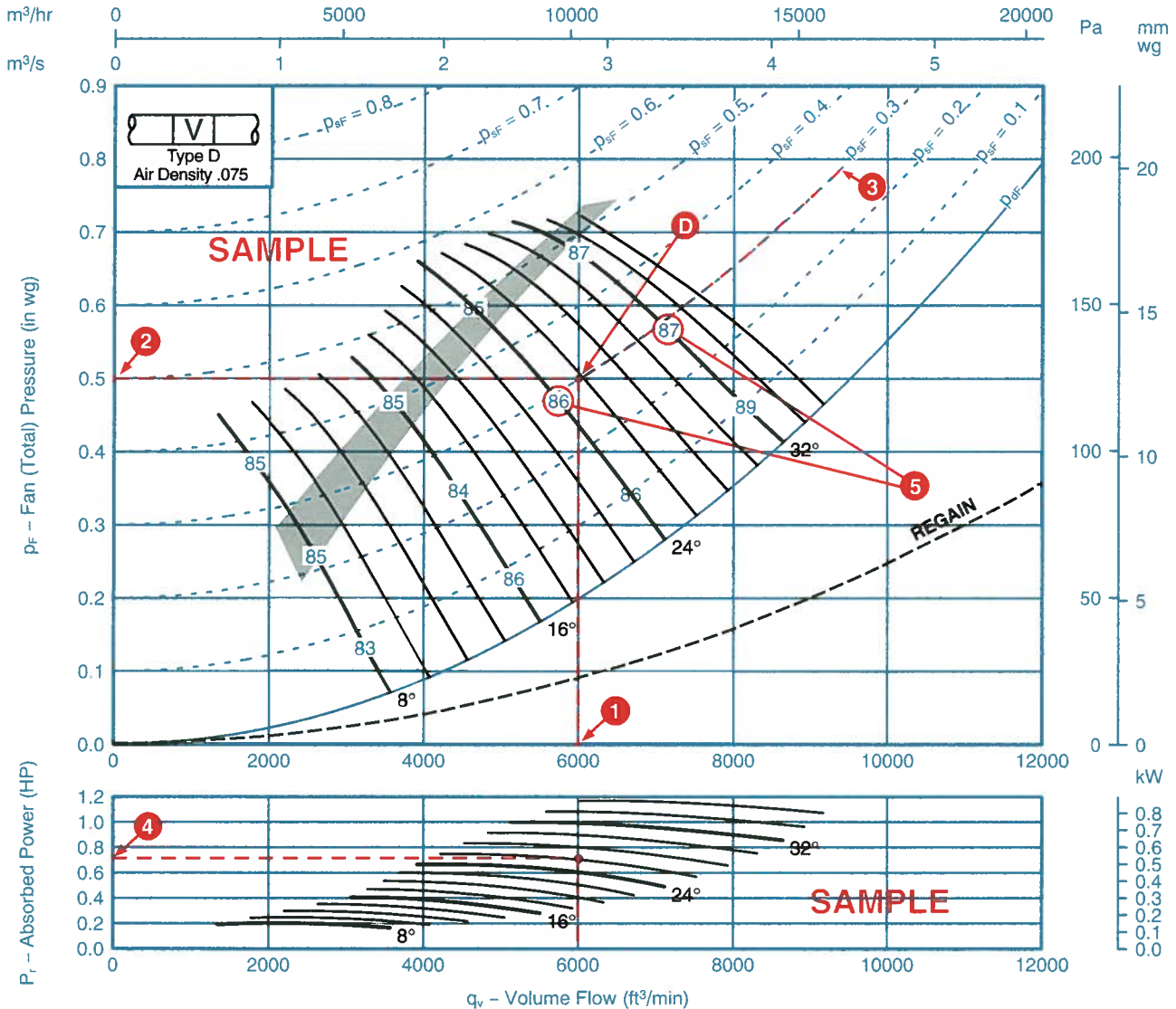
Fan Code: 63JM/20/6/3/ ...
 630 mm 1170 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-7	-10	-5	-6	-12	-17	-24	-31	
	-2	-11	-8	-10	-13	-15	-20	-27	
16°	-6	-10	-4	-8	-14	-16	-25	-31	
	-1	-11	-11	-17	-19	-19	-24	-30	
24-36°	-2	-9	-9	-14	-16	-19	-22	-26	
	-1	-10	-11	-17	-20	-22	-26	-29	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-5	-10	-5	-5	-12	-17	-23	-28	
	-1	-11	-8	-10	-13	-14	-19	-25	
16°	-4	-10	-4	-8	-14	-16	-24	-28	
	0	-11	-11	-17	-19	-19	-23	-28	
24-36°	-1	-9	-9	-14	-16	-19	-20	-24	
	0	-10	-11	-16	-20	-22	-24	-27	

SK10305

6

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0

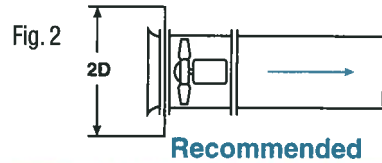
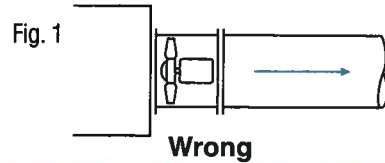
7

JM AEROFOIL Installation Recommendations



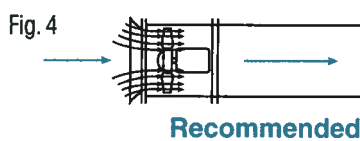
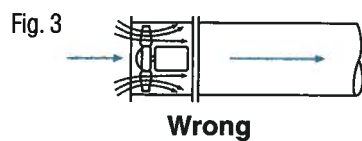
2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

A sharp-edged fan inlet orifice reduces fan performance.



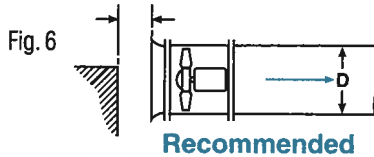
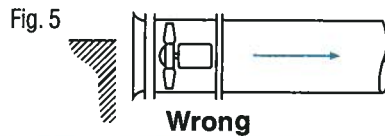
Fit a bell-mouth inlet to the fan.

A flanged fan inlet starves the impeller blade tips of air reducing performance and increasing noise.



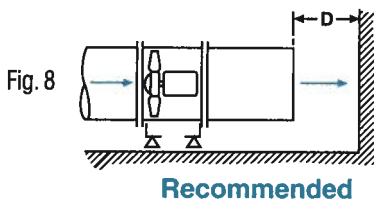
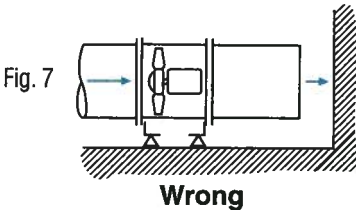
A bellmouth inlet guides air into the impeller blade tips.

Avoid obstructions close to fan inlets. Part of impeller is starved of air.



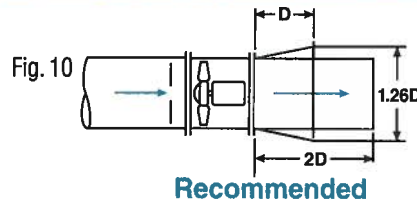
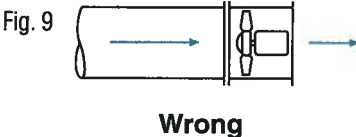
Allow a space of at least one diam. (D) at the fan inlet.

Avoid obstruction close to the fan outlet.



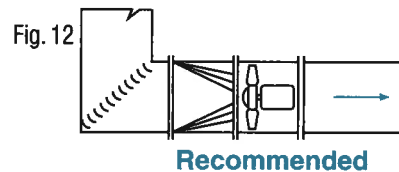
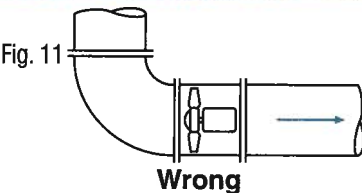
Allow a space of at least the fan diam. (D) at the fan outlet.

Avoid fan terminating the discharge end of a system.



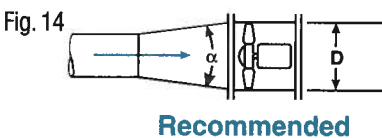
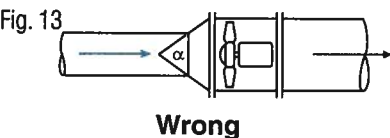
Fit a duct length of 2D or an outlet expander $D \times 1.26$ after the fan at the discharge end. Extra ducting after the expander helps even more. See charts.

Fan performance suffers and noise is increased if a 90° circular section bend of small radius is used.



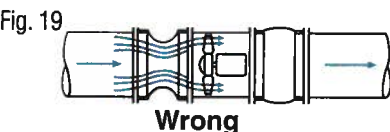
Use a square bend with short chord turning vanes. This is also preferable when air flow is in the opposite direction.

Do not use an expander of 30° or more immediately before or after a fan.

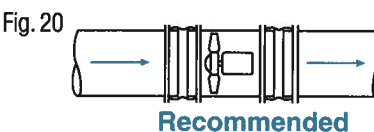


Ideally an expander immediately before a fan should not be more than 15°.

Flexible connectors should not be slack, as this will cause "necking", which will starve the impeller blade tips of air, reduce fan performance, and increase noise.



Flex Connectors



Flexible connectors should be just long enough for mechanical isolation and should be taut.



JM AEROFOIL

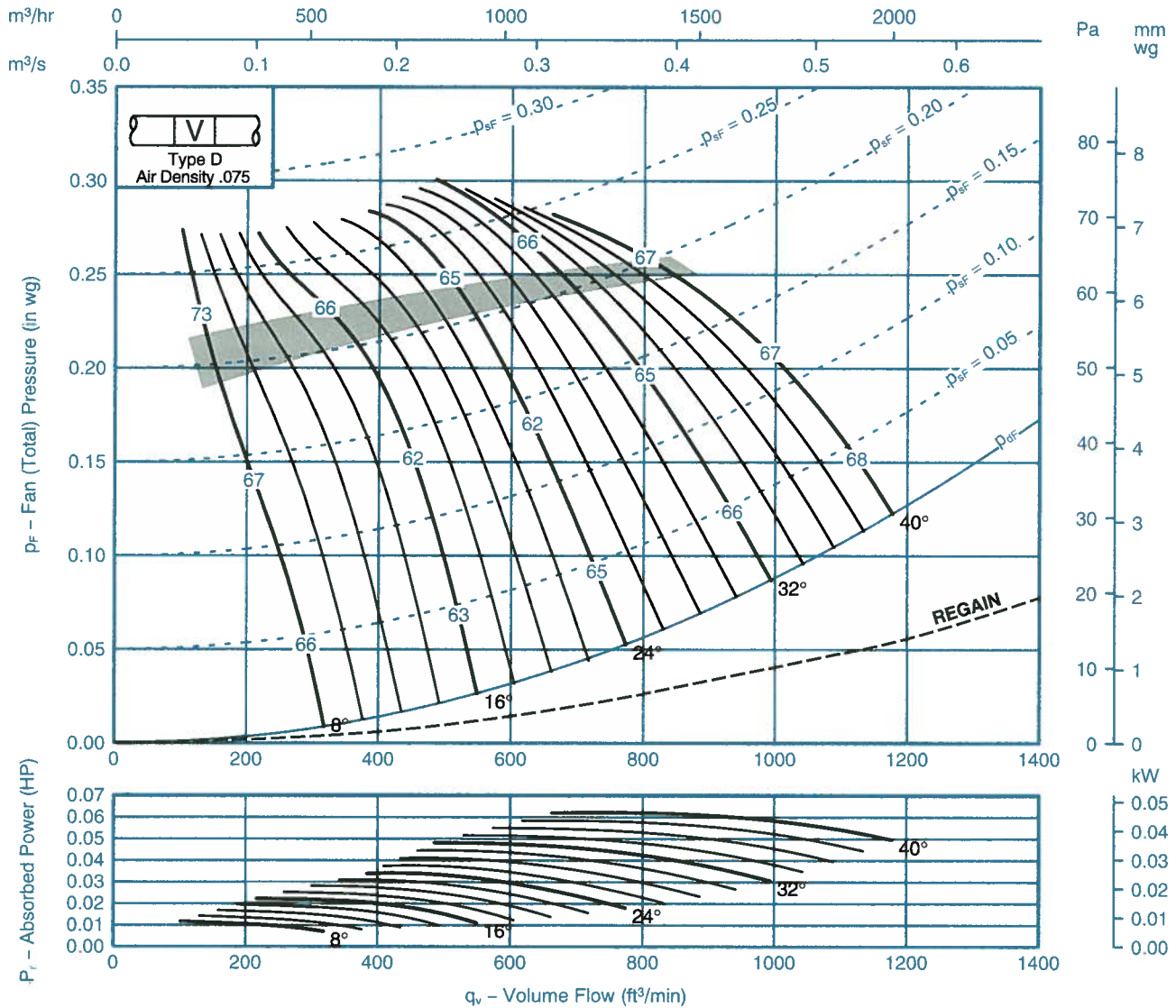
Fan Code: 31 JM/16/6/5/...
 315 mm 1170 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-4	-5	-6	-12	-19	-26	-31	-39	
	-10	-8	-4	-6	-13	-20	-27	-36	
16°	-7	-4	-6	-10	-15	-23	-29	-37	
	-6	-5	-6	-9	-12	-17	-22	-28	
24-40°	-3	-6	-9	-13	-17	-21	-25	-31	
	-4	-5	-8	-10	-14	-18	-24	-30	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-2	-3	-6	-12	-19	-25	-31	-39	
	-8	-5	-4	-6	-13	-20	-26	-34	
16°	-4	-2	-6	-10	-15	-22	-29	-37	
	-64	-3	-6	-9	-12	-16	-22	-28	
24-40°	-1	-5	-9	-12	-16	-19	-23	-29	
	-2	-2	-8	-10	-14	-18	-23	-29	

SK10262

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-14	-8	-4	-1	0	0	0	0



JM AEROFOIL

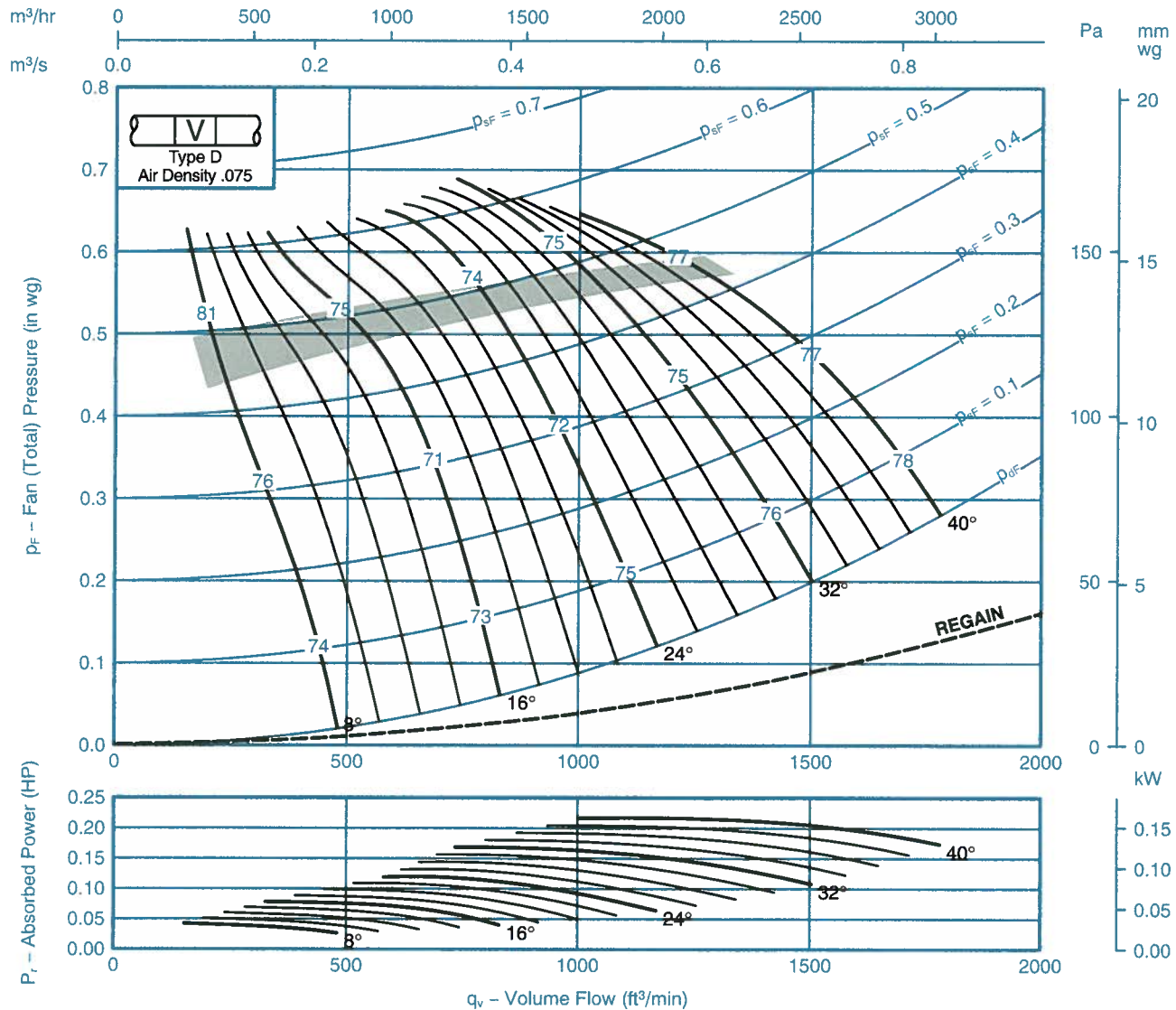
Fan Code: 31JM/16/4/5/...
 315 mm 1770 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-9	-4	-6	-7	-16	-22	-29	-35
	-13	-7	-9	-3	-9	-16	-23	-31
16°	-12	-4	-8	-6	-13	-19	-26	-32
	-12	-4	-8	-7	-11	-14	-19	-25
24-40°	-4	-4	-10	-11	-16	-18	-24	-28
	-8	-3	-9	-9	-13	-16	-22	-27

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-6	-2	-4	-7	-15	-21	-29	-34
	-12	-5	-8	-3	-9	-16	-22	-29
16°	-10	-1	-7	-6	-12	17	-26	-32
	-10	-1	-7	-7	-10	-13	-19	-25
24-40°	-3	-3	-9	-10	-15	-17	-22	-26
	-6	0	-8	-9	-13	-16	-21	-26

SK10263

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-14	-8	-4	-1	0	0	0	0



JM AEROFOIL

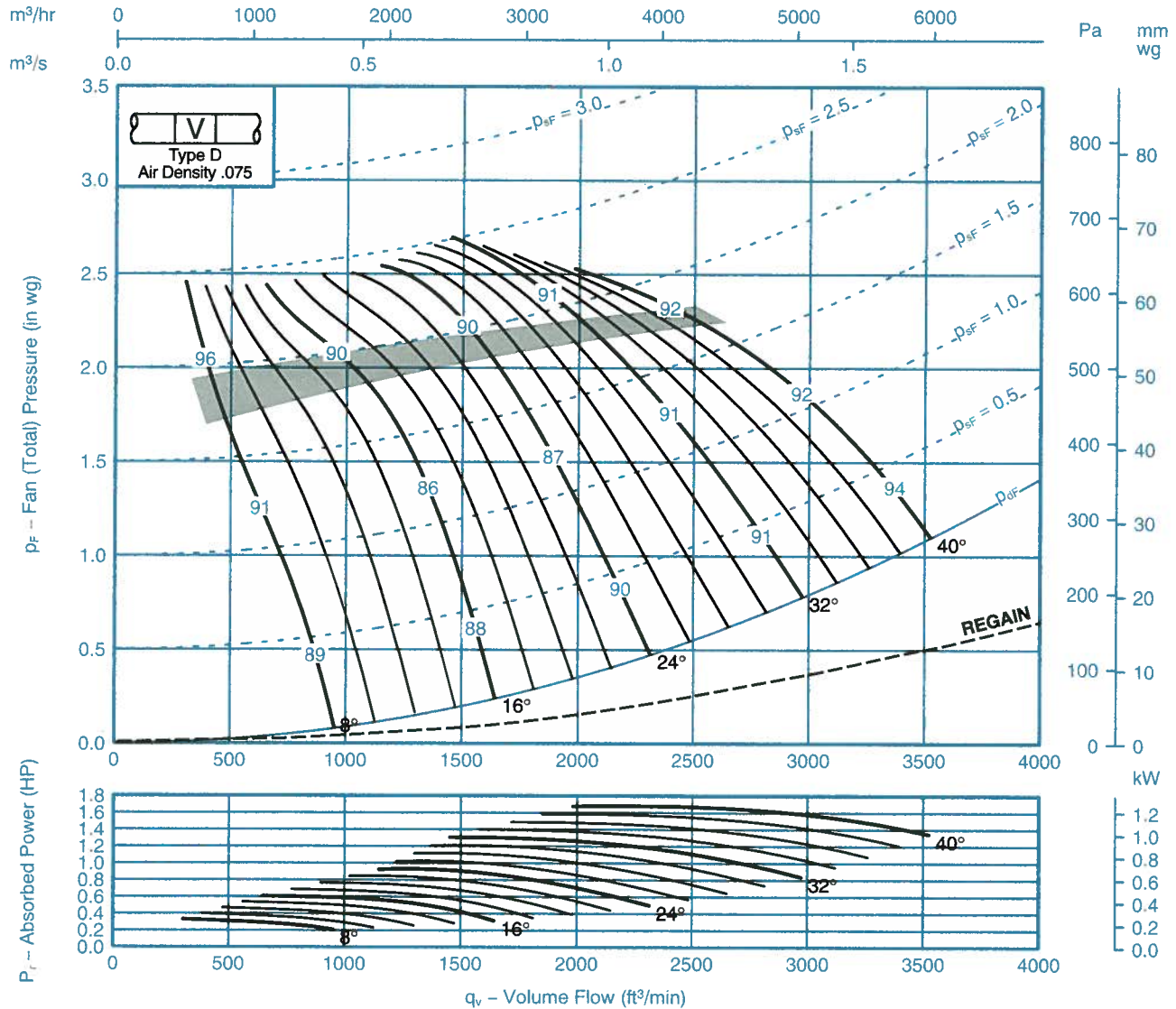
Fan Code: 31JM/16/2/5/...
 315 mm 3500 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-13	-9	-5	-6	-7	-16	-22	-29
	Lower	-16	-13	-8	-9	-3	-9	-16	-23
16°	Upper	-15	-12	-4	-8	-6	-13	-19	-26
	Lower	-15	-12	-4	-8	-7	-11	-14	-20
24-40°	Upper	-9	-5	-5	-10	-11	-17	-19	-25
	Lower	-9	-8	-4	-10	-10	-14	-17	-22

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-10	-8	-3	-4	-7	-15	-22	-29
	Lower	-14	-13	-5	-8	-3	-9	-15	-21
16°	Upper	-13	-12	-1	-7	-5	-12	-19	-26
	Lower	-13	-12	-2	-7	-6	-10	-14	-20
24-40°	Upper	-7	-5	-4	-9	-10	-15	-17	-23
	Lower	-7	-8	-1	-8	-10	-13	-16	-21

SK10264

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-14	-8	-4	-1	0	0	0	0



JM AEROFOIL

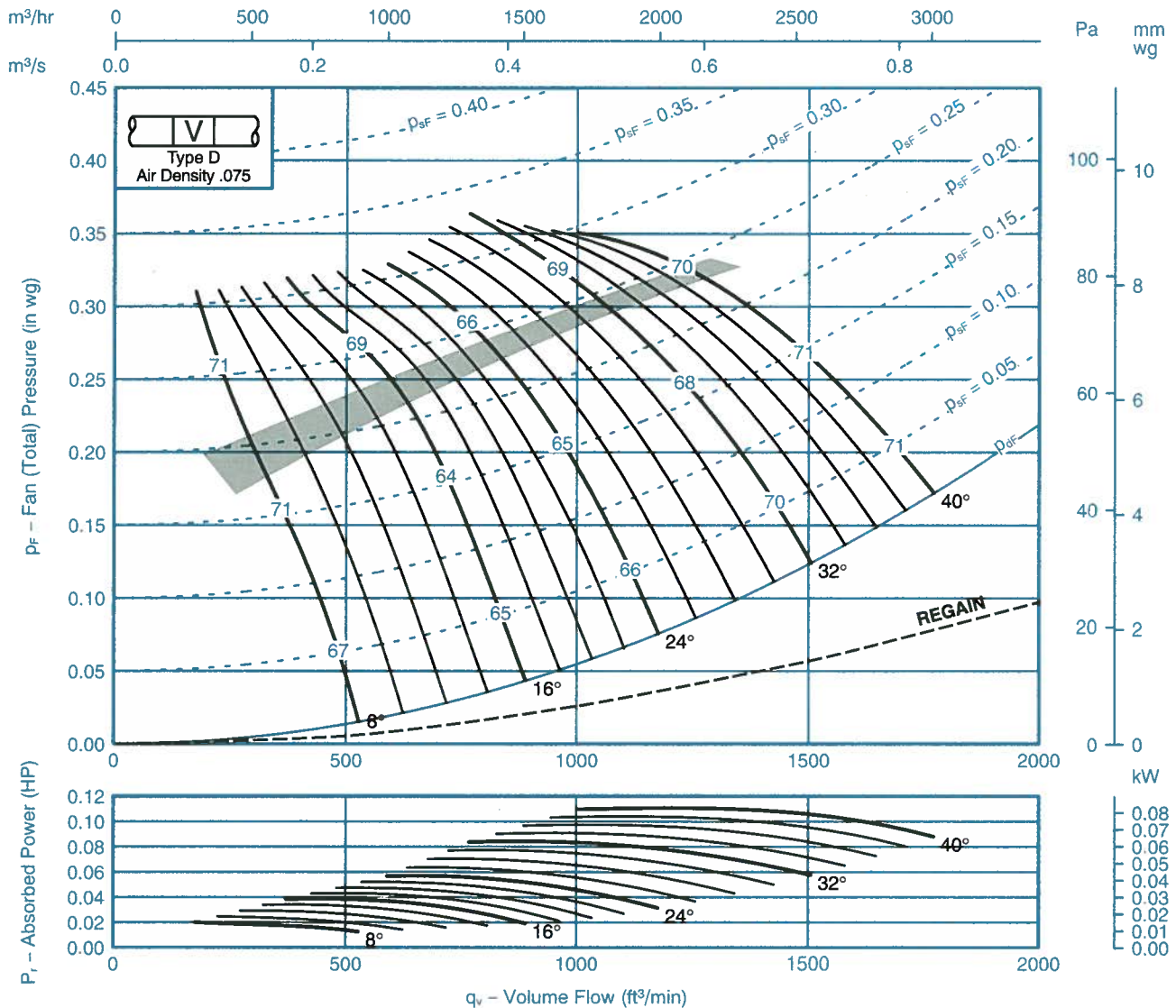
Fan Code: 35JM/16/6/5/...
 355 mm 1170 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-7	-6	-4	-8	-16	-23	-30	-38
	-12	-10	-4	-5	-12	-18	-25	-32
16°	-8	-6	-4	-9	-13	-18	-23	-28
	-7	-7	-6	-7	-10	-14	-19	-24
24-40°	-4	-7	-7	-9	-15	-19	-24	-30
	-5	-6	-6	-9	-13	-17	-23	-28

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-4	-4	-4	-8	-16	-22	-30	-38
	-10	-8	-4	-5	-12	-18	-23	-30
16°	-5	-4	-4	-9	-12	-17	-23	-28
	-5	-5	-6	-7	-10	-13	-19	-24
24-40°	-2	-6	-7	-8	-14	-18	-23	-28
	-3	-3	-6	-9	-13	-17	-22	-27

SK10265

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-12	-7	-4	-1	0	0	0	0



JM AEROFOIL

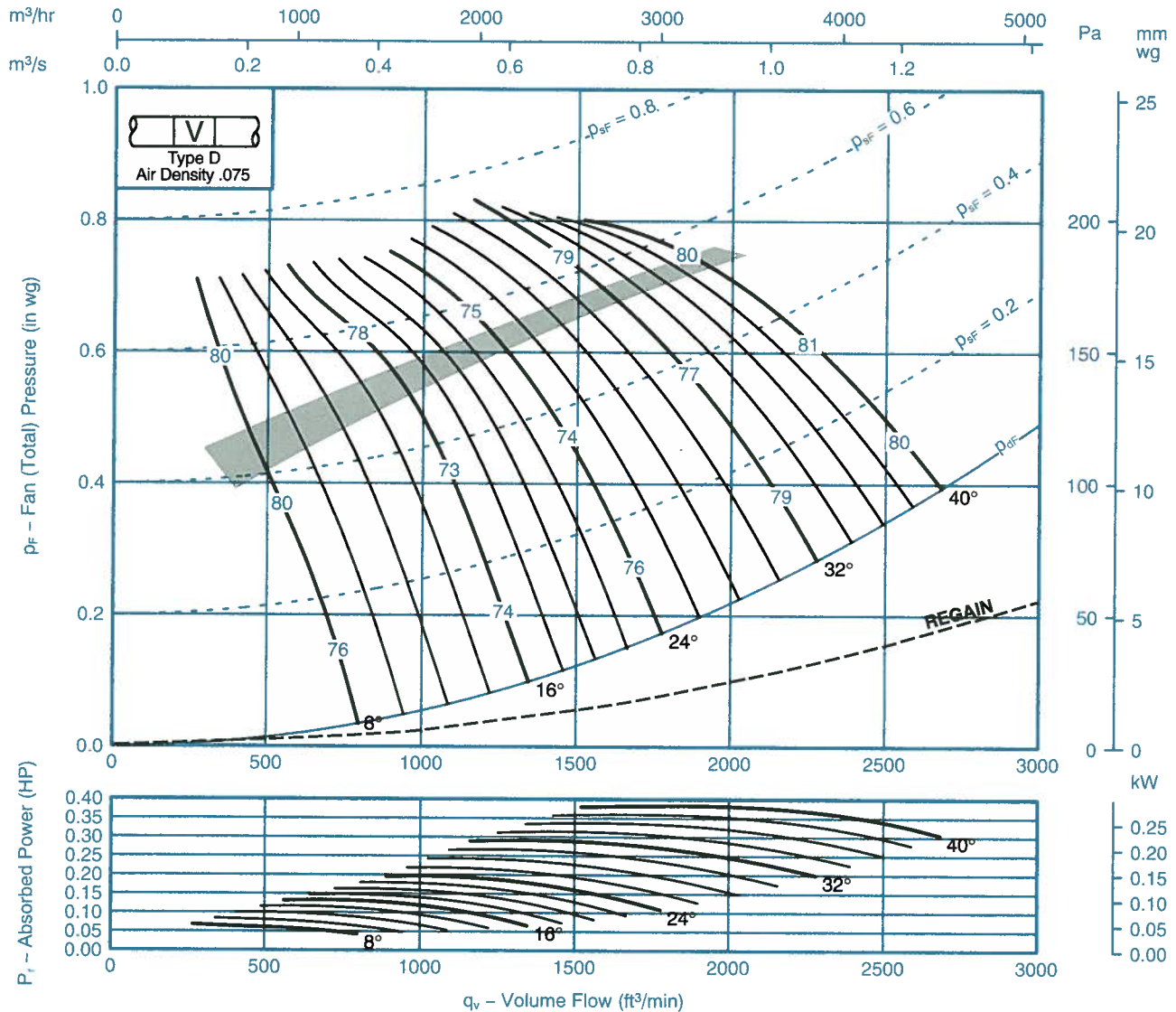
Fan Code: 35JM/16/4/5/...
 355 mm 1770 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-10	-6	-6	-5	-12	-19	-26	-33	
	-14	-10	-8	-3	-8	-15	-20	-28	
16°	-13	-5	-7	-5	-12	-14	-20	-25	
	-11	-5	-7	-6	-9	-12	-16	-21	
24-40°	-6	-5	-8	-8	-13	-17	-22	-28	
	-8	-4	-8	-7	-12	-15	-20	-26	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-8	-4	-5	-5	-11	-19	-26	-33	
	-13	-7	-8	-3	-8	-15	-19	-26	
16°	-11	-2	-6	-5	-12	-13	-20	-25	
	-10	-3	-7	-6	-9	-12	-16	-22	
24-40°	-4	-4	-8	-7	-12	-16	-20	-26	
	-6	-2	-7	-7	-12	-15	-19	-25	

SK10266

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-12	-7	-4	-1	0	0	0	0



JM AEROFOIL

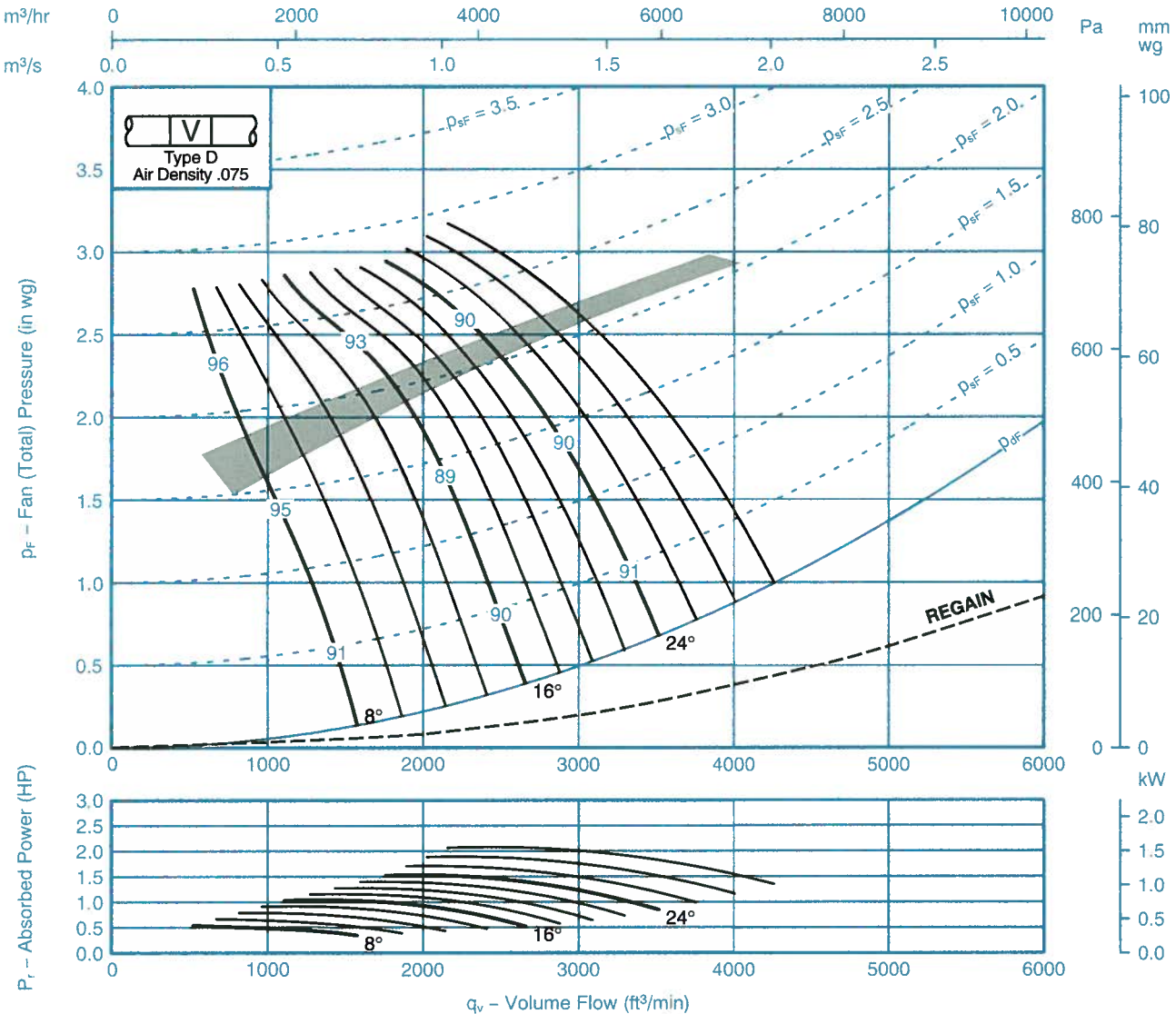
Fan Code: 35JM/16/2/5...
 355 mm 3500 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-13	-11	-6	-6	-5	-12	-20	-26	
	-17	-15	-10	-8	-3	-8	-15	-21	
16°	-10	-13	-6	-7	-5	-13	-15	-21	
	-10	-12	-6	-8	-7	-10	-13	-16	
24-30°	-8	-6	-6	-9	-9	-14	-18	-23	
	-7	-9	-5	-9	-8	-13	-16	-21	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-10	-10	-4	-5	-5	-11	-20	-26	
	-15	-15	-8	-7	-3	-8	-14	-18	
16°	-9	-13	-3	-6	-4	-12	-15	-21	
	-8	-12	-3	-7	-6	-9	-13	-16	
24-30°	-7	-6	-5	-7	-8	-12	-16	-21	
	-5	-8	-3	-8	-8	-13	-15	-20	

SK10267

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-12	-7	-4	-1	0	0	0	0



JM AEROFOIL

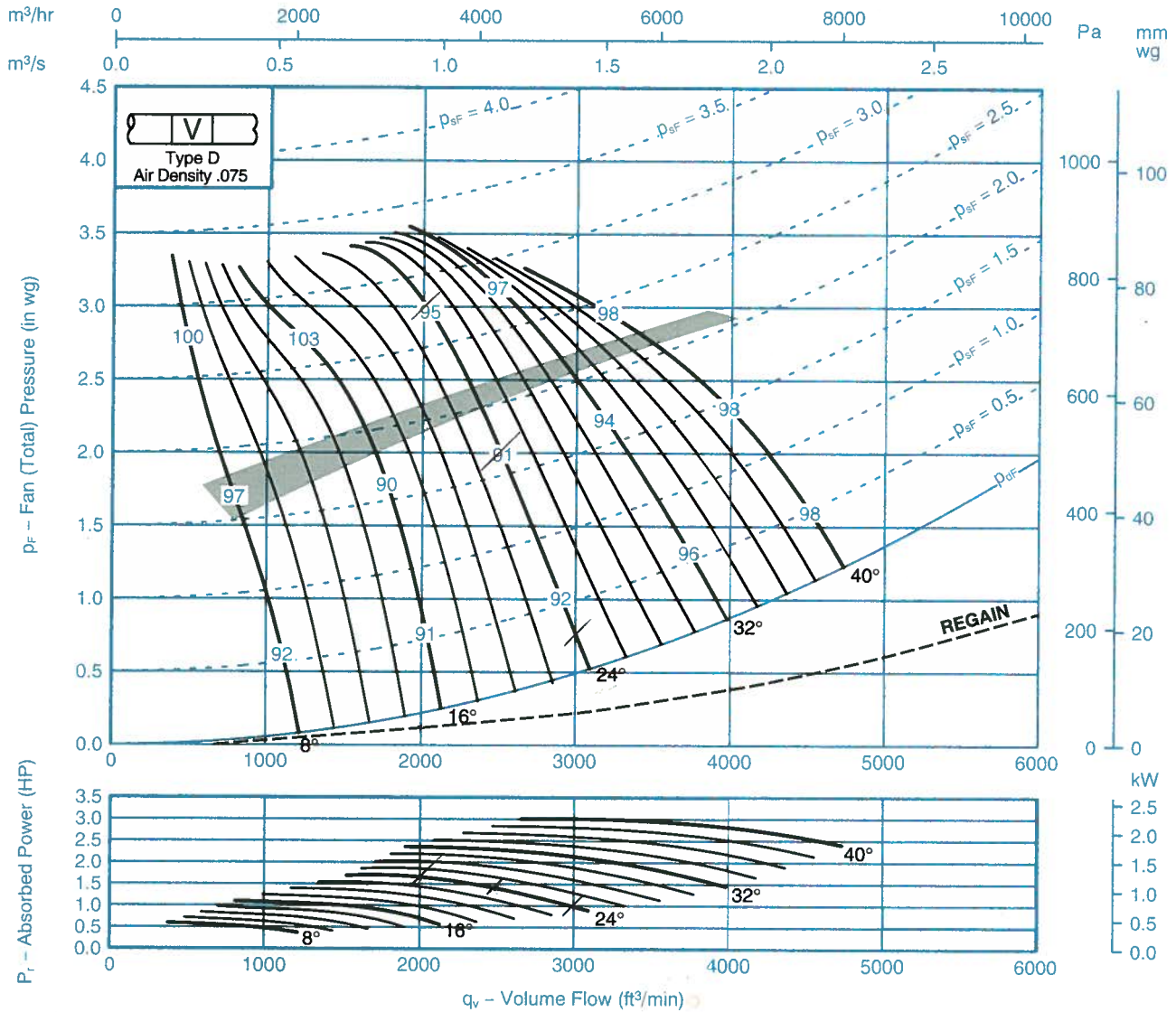
Fan Code: 35JM/20/2/6...
 355 mm 3500 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-13	-11	-6	-6	-5	-12	-20	-26
	Lower	-17	-15	-10	-8	-3	-8	-15	-21
16°	Upper	-10	-13	-6	-7	-5	-13	-15	-21
	Lower	-10	-12	-6	-8	-7	-10	-13	-16
24-40°	Upper	-8	-6	-6	-9	-9	-14	-18	-23
	Lower	-7	-9	-5	-9	-8	-13	-16	-21

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-10	-10	-4	-5	-5	-11	-20	-26
	Lower	-15	-15	-8	-7	-3	-8	-14	-18
16°	Upper	-9	-13	-3	-6	-4	-12	-15	-21
	Lower	-8	-12	-3	-7	-6	-9	-13	-16
24-40°	Upper	-7	-6	-5	-7	-8	-12	-16	-21
	Lower	-5	-8	-3	-8	-8	-13	-15	-20

SK10629

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-12	-7	-4	-1	0	0	0	0



JM AEROFOIL

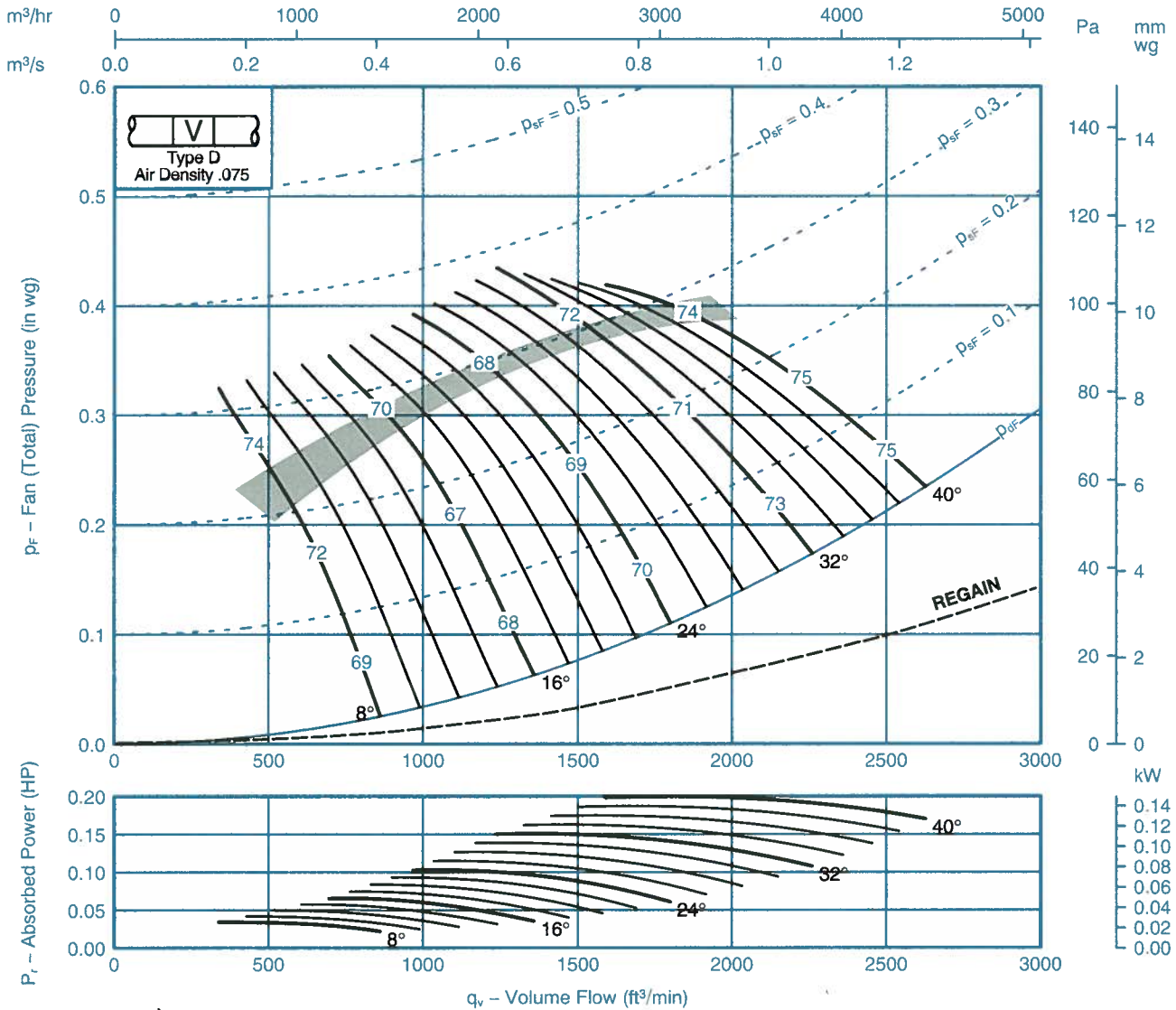
Fan Code: 40JM/16/6/5/...
 400 mm 1170 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-8	-6	-5	-6	-14	-21	-28	-36	
	-12	-8	-6	-5	-10	-15	-21	-28	
16°	-7	-5	-7	-8	-11	-16	-22	-27	
	-8	-5	-7	-8	-10	-13	-18	-22	
24-40°	-4	-7	-8	-10	-14	-17	-22	-27	
	-5	-5	-7	-9	-13	-16	-21	-26	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-5	-4	-5	-6	-13	-20	-28	-36	
	-10	-6	-6	-5	-10	-15	-20	-26	
16°	-4	-3	-7	-8	-11	-15	-22	-27	
	-5	-2	-7	-8	-10	-13	-18	-22	
24-40°	-2	-5	-8	-9	-13	-15	-20	-25	
	-2	-3	-7	-9	-13	-16	-20	-25	

SK10268

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-11	-6	-3	-1	0	0	0	0



JM AEROFOIL

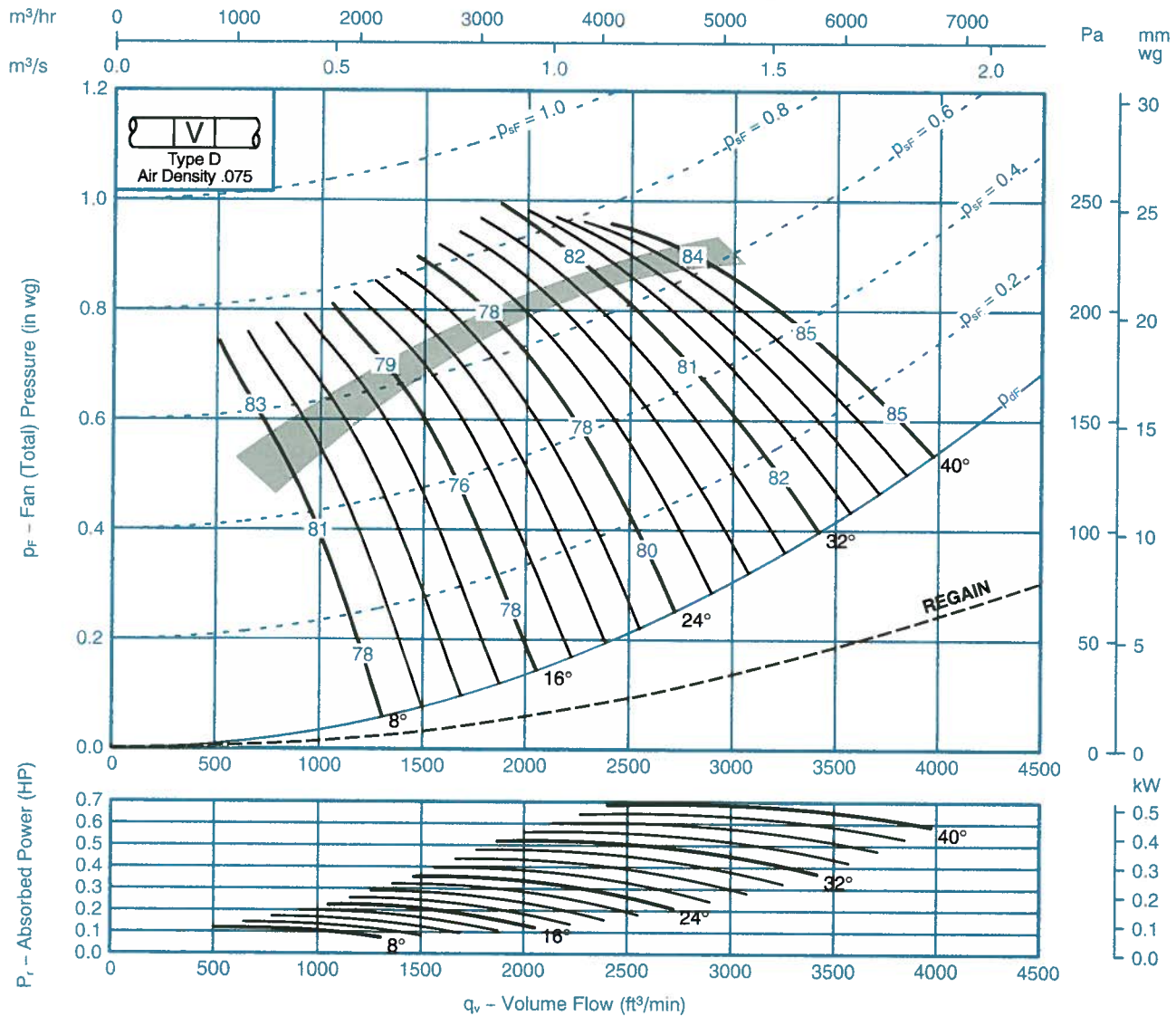
Fan Code: 40JM/16/4/5/...
 400 mm 1770 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-11	-6	-7	-5	-10	-17	-24	-31
	-14	-8	-8	-5	-6	-12	-17	-24
16°	-11	-4	-7	-7	-10	-13	-19	-25
	-11	-4	-8	-8	-10	-12	-15	-20
24-40°	-5	-5	-9	-10	-13	-16	-20	-25
	-7	-4	-8	-9	-12	-15	-18	-24

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-8	-4	-6	-5	-10	-16	-24	-31
	-12	-6	-8	-5	-6	-12	-16	-22
16°	-10	-1	-6	-7	-9	-12	-19	-25
	-9	-1	-7	-8	-9	-11	-15	-20
24-40°	-4	-3	-8	-9	-12	-14	-18	-23
	-5	-1	-7	-9	-12	-15	-17	-23

SK10269

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-11	-6	-3	-1	0	0	0	0



JM AEROFOIL

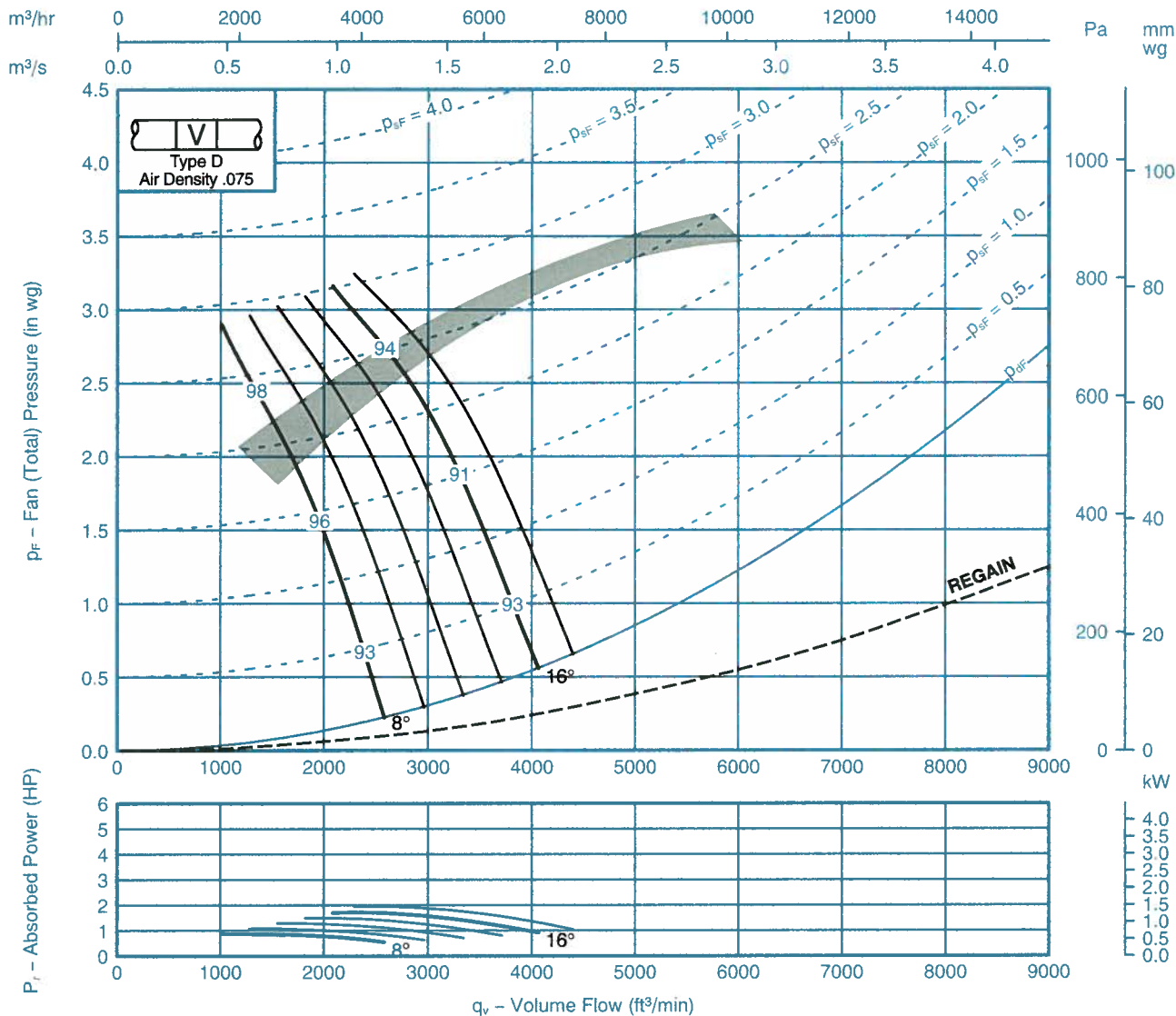
Fan Code: 40JM/16/2/5/...
 400 mm 3500 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-14	-11	-7	-8	-5	-10	-17	-25
	Lower	-17	-14	-9	-9	-5	-7	-13	-18
16-18°	Upper	-12	-12	-5	-8	-8	-11	-14	-19
	Lower	-12	-12	-5	-8	-9	-10	-12	-16

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-11	-10	-4	-6	-5	-9	-17	-24
	Lower	-14	-14	-6	-8	-5	-6	-11	-15
16-18°	Upper	-10	-11	-2	-6	-7	-10	-13	-19
	Lower	-10	-11	-2	-7	-8	-9	-12	-15

SK10270

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-11	-6	-3	-1	0	0	0	0



JM AEROFOIL

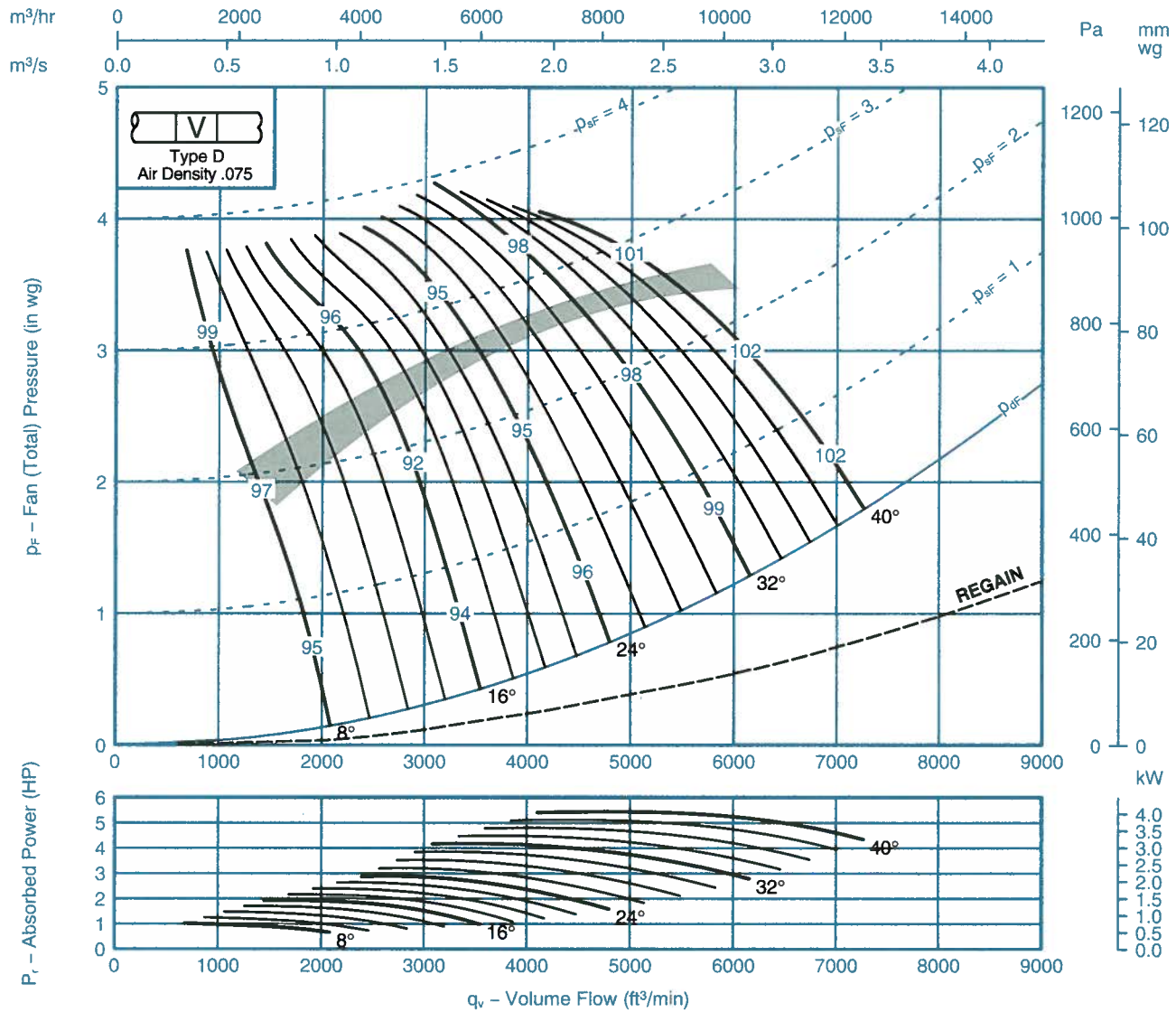
Fan Code: 40JM/20/2/6/...
 400 mm 3500 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-14	-11	-7	-8	-5	-10	-17	-25	
	-17	-14	-9	-9	-5	-7	-13	-18	
16°	-12	-12	-5	-8	-8	-11	-14	-19	
	-12	-12	-5	-8	-9	-10	-12	-16	
24-40°	-9	-6	-6	-9	-11	-14	-17	-21	
	-9	-8	-5	-9	-10	-13	-16	-19	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-11	-10	-4	-6	-5	-9	-17	-24	
	-14	-14	-6	-8	-5	-6	-11	-15	
16°	-10	-11	-2	-6	-7	-10	-13	-19	
	-10	-11	-2	-7	-8	-9	-12	-15	
24-40°	-7	-5	-4	-8	-10	-12	-15	-18	
	-6	-7	-2	-8	-10	-12	-15	18	

SK10630

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-11	-6	-3	-1	0	0	0	0



JM AEROFOIL

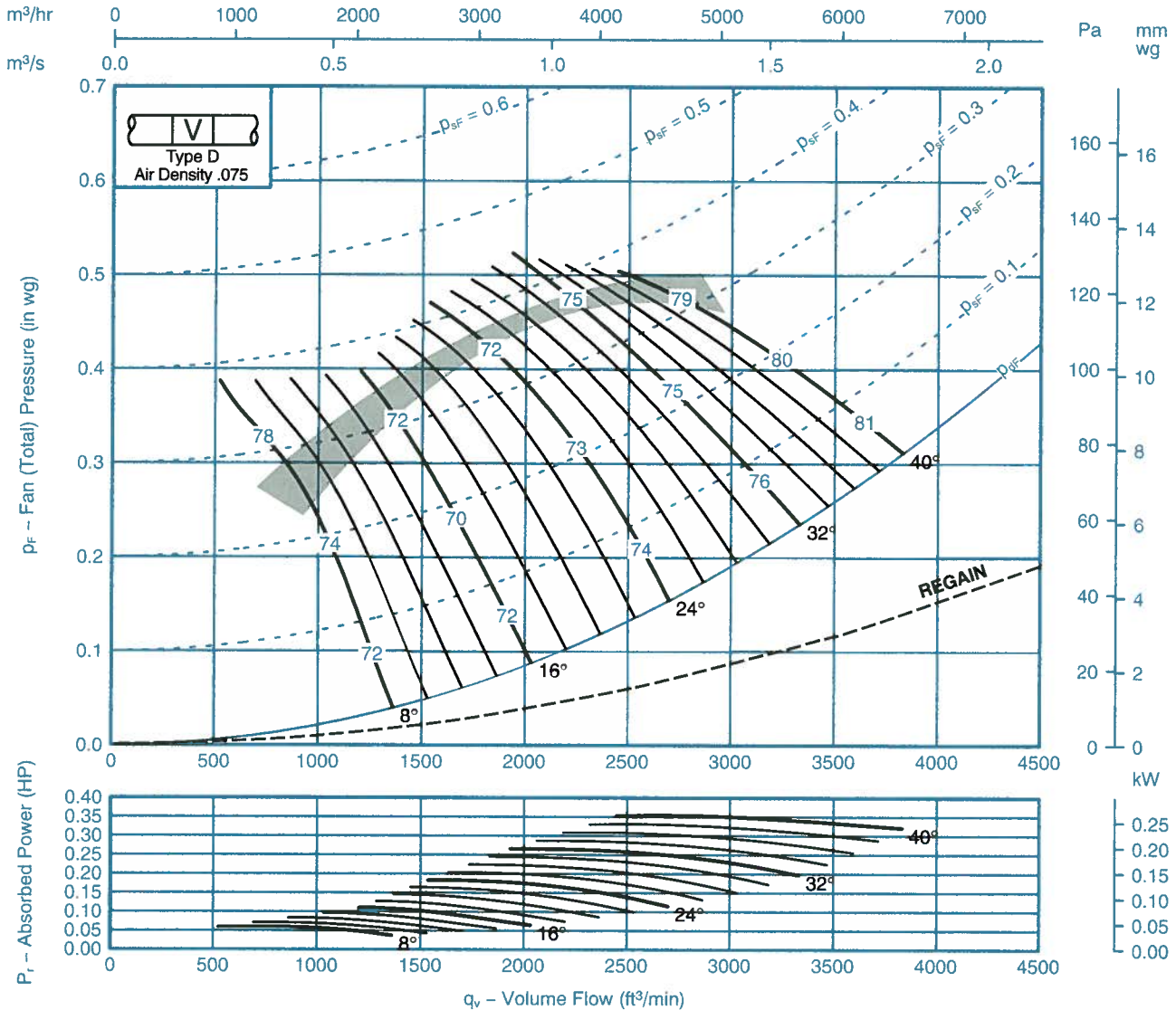
Fan Code: 45JM/16/6/5/...
 450 mm 1170 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-9	-6	-6	-5	-11	-19	-26	-34
	Lower	-12	-7	-8	-5	-8	-12	-18	-25
16°	Upper	-7	-5	-10	-6	-10	-15	-22	-28
	Lower	-8	-3	-9	-10	-11	-13	-17	-20
24-40°	Upper	-4	-6	-10	-11	-13	-15	-19	-23
	Lower	-5	-5	-9	-10	-13	-15	-20	-24

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-8	-4	-6	-5	-11	-18	-25	-32
	Lower	-12	-6	-8	-5	-8	-11	-18	-23
16°	Upper	-6	-5	-10	-6	-10	-15	-21	-26
	Lower	-8	-3	-9	-10	-11	-13	-16	-18
24-40°	Upper	-2	-6	-10	-11	-13	-15	-18	-22
	Lower	-4	-4	-9	-10	-13	-15	-19	-22

SK10272

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

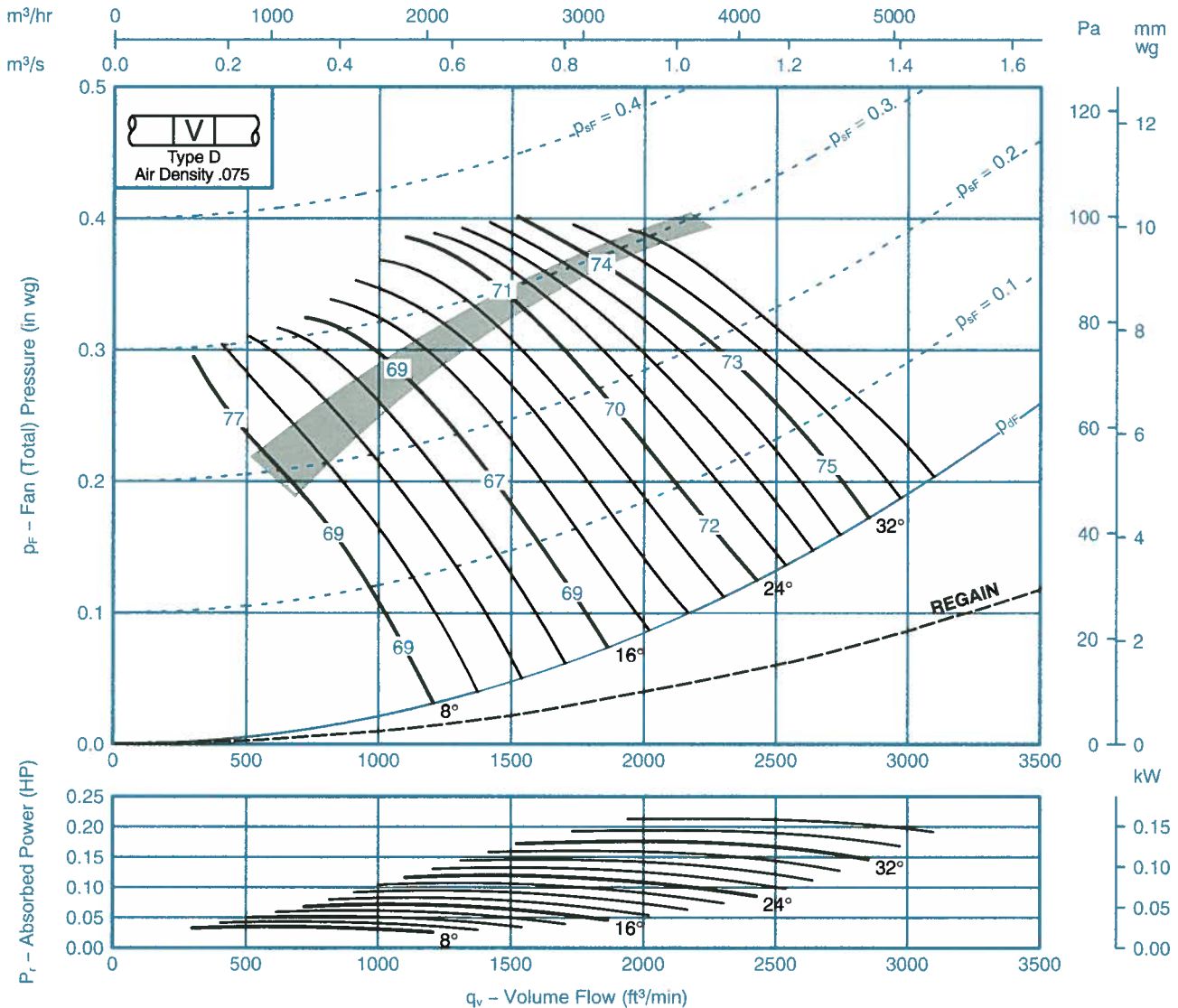
Fan Code: 45JM/20/6/3/...
 450 mm 1170 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-16	-12	-4	-4	-11	-21	-28	-38	
	-10	-9	-5	-6	-9	-13	-16	-21	
16°	-7	-6	-5	-9	-13	-17	-21	-27	
	-6	-8	-6	-8	-11	-15	-19	-24	
24-36°	-4	-6	-7	-11	-13	-17	-20	-24	
	-4	-7	-7	-10	-12	-17	-21	-26	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-13	-12	-4	-4	-11	-20	-27	-36	
	-7	-9	-5	-6	-9	-13	-15	-19	
16°	-6	-6	-5	-9	-13	-16	-21	-26	
	-3	-8	-6	-8	-11	-15	-18	-22	
24-36°	-2	-6	-7	-10	-12	-16	-18	-21	
	-1	-7	-7	-10	-12	-16	-20	-24	

SK10273

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

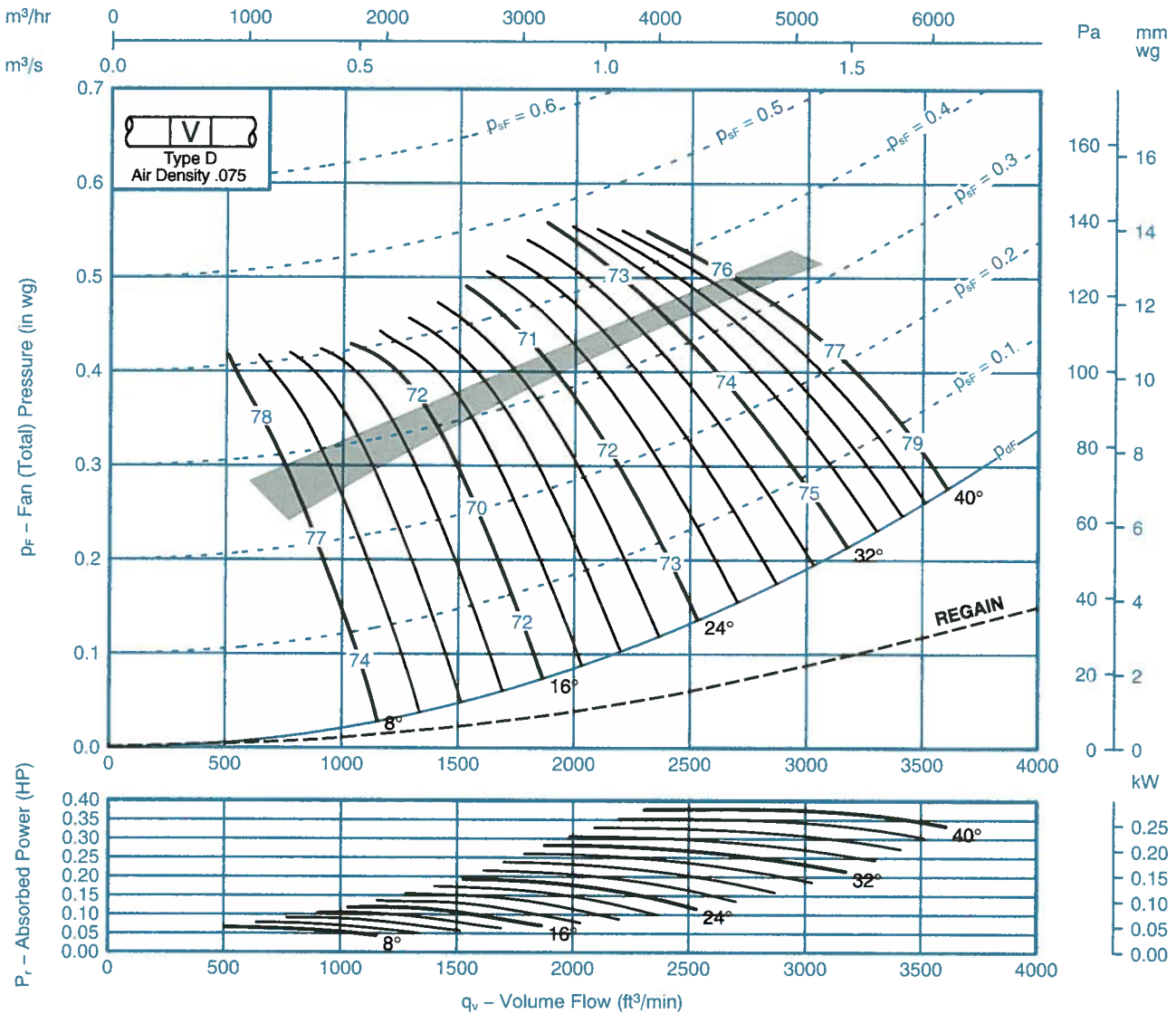
Fan Code: 45JM/20/6/6/...
 450 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-14	-11	-4	-4	-11	-20	-28	-38
	-16	-11	-5	-4	-8	-15	-19	-27
16°	-11	-6	-5	-8	-10	-14	-20	-25
	-13	-7	-5	-7	-9	-12	-16	-19
24-40°	-6	-6	-6	-9	-12	-16	-20	-25
	-8	-6	-6	-8	-11	-15	-19	-23

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-9	-4	-4	-11	-19	-27	-36
	-15	-9	-5	-4	-8	-14	-18	-25
16°	-10	-4	-4	-8	-10	-14	-20	-24
	-12	-5	-5	-7	-9	-12	-16	-19
24-40°	-5	-5	-5	-9	-11	-15	-18	-23
	-5	-3	-6	-8	-11	-15	-18	-22

SK10274

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

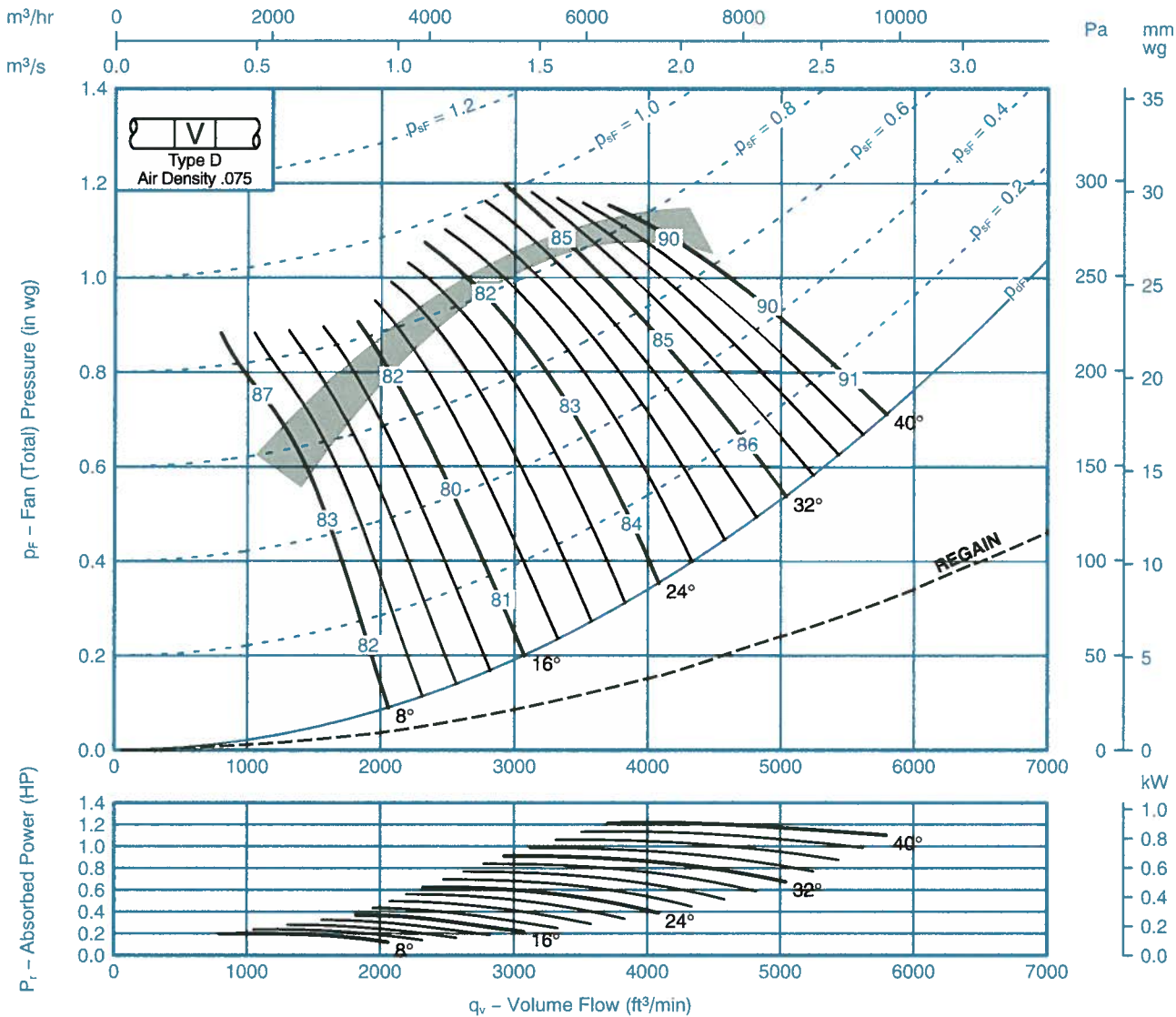
Fan Code: 45JM/16/4/5/...
 450 mm 1770 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Pitch Angle	Inlet Levels							
	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-6	-9	-5	-8	-14	-22	-30
	-13	-7	-9	-7	-5	-10	-15	-21
16°	-10	-4	-8	-9	-9	-12	-15	-25
	-11	-3	-9	-11	-11	-12	-15	-19
24-40°	-5	-5	-9	-13	-13	-15	-17	-22
	-6	-4	-8	-11	-12	-15	-17	-23

Pitch Angle	Outlet Levels							
	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-11	-4	-8	-5	-8	-14	-21	-27
	-14	-6	-9	-7	-6	-9	-15	-20
16°	-9	-4	-8	-9	-9	-12	-17	-23
	-11	-2	-9	-11	-11	-12	-14	-17
24-40°	-4	-5	-9	-13	-13	-15	-17	-21
	-6	-4	-8	-11	-12	-14	-16	-21

SK10275

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

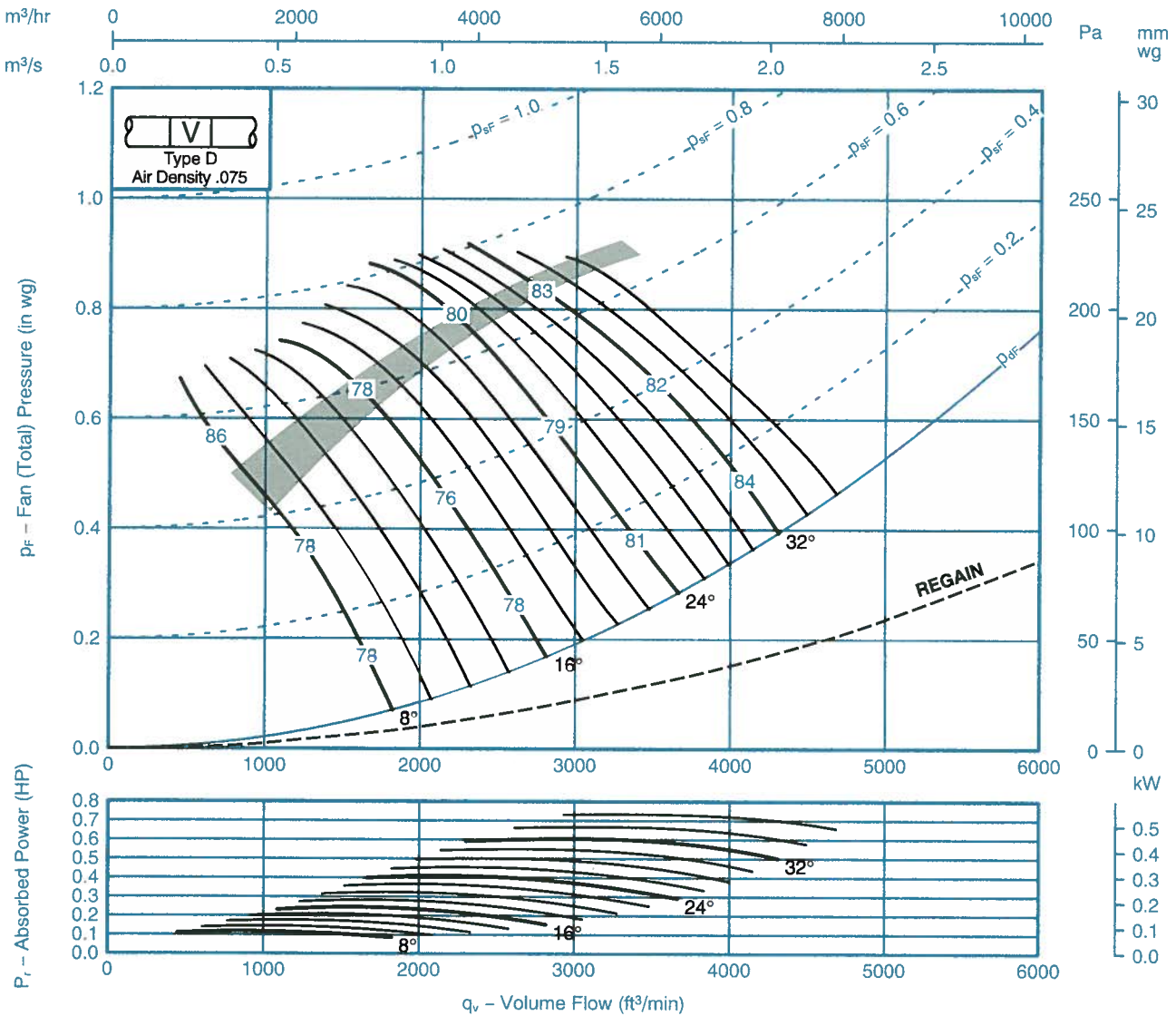
Fan Code: 45JM/20/4/3/...
 450 mm 1770 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-16	-8	-3	-7	-15	-24	-32
	-11	-12	-7	-5	-6	-12	-14	-18
16°	-8	-7	-6	-6	-11	-15	-19	-24
	-7	-10	-6	-6	-9	-13	-16	-21
24-36°	-5	-8	-6	-9	-12	-15	-18	-22
	-4	-10	-6	-8	-11	-14	-18	-23

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-14	-15	-8	-3	-7	-15	-23	-30
	-8	-12	-7	-5	-6	-11	-12	-16
16°	-7	-7	-6	-6	-10	-14	-18	-23
	-4	-9	-6	-6	-9	-13	-16	-20
24-36°	-3	-7	-6	-9	-11	-14	-16	-19
	-2	-9	-6	-8	-11	-14	-17	-21

SK10276

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

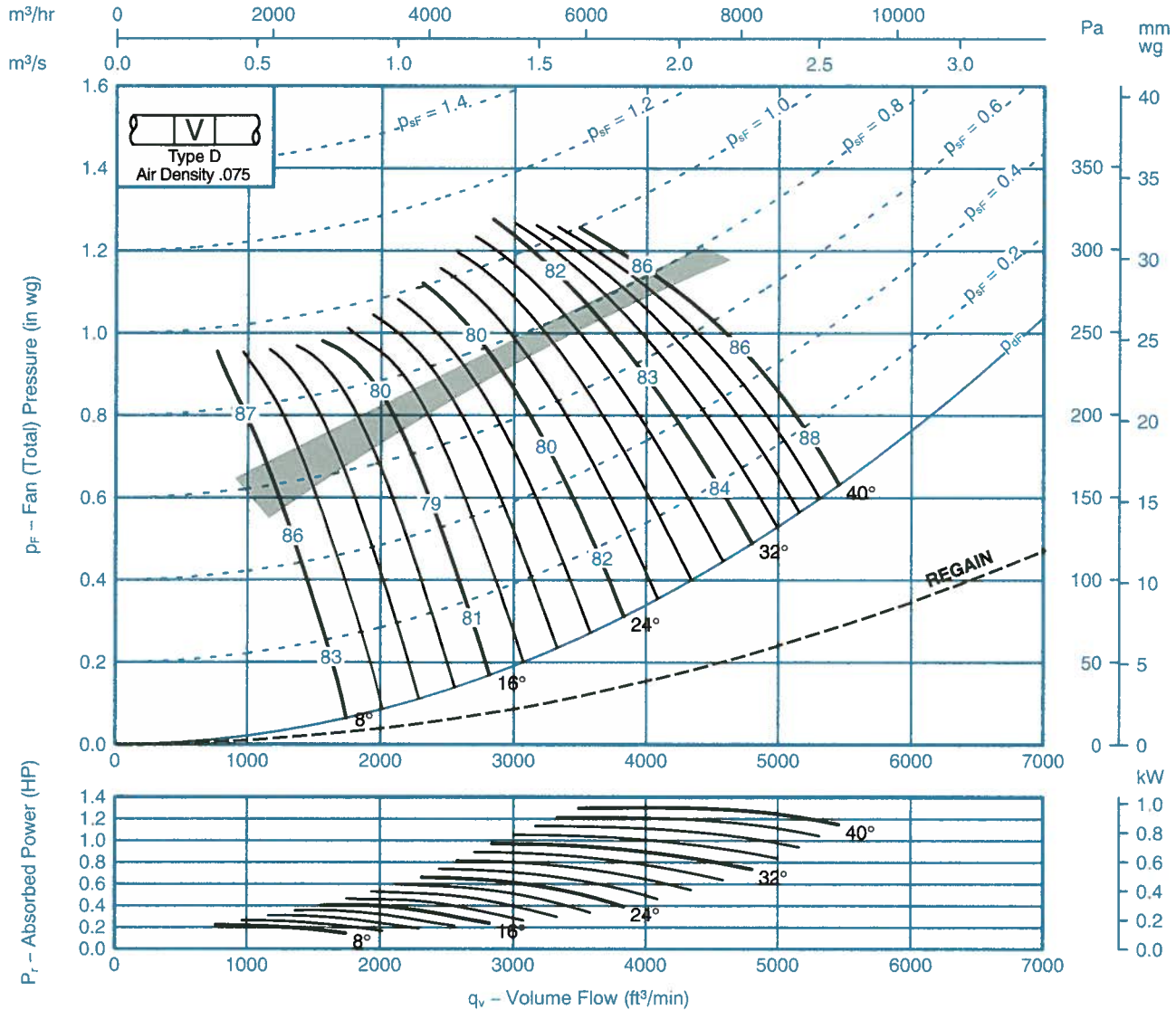
Fan Code: 45JM/20/4/6/...
 450 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-18	-12	-8	-3	-6	-15	-23	-32	
	-19	-14	-8	-5	-4	-12	-16	-23	
16°	-14	-7	-7	-5	-8	-12	-16	-22	
	-15	-8	-8	-5	-7	-11	-13	-17	
24-40°	-7	-6	-9	-7	-10	-14	-17	-22	
	-9	-6	-8	-7	-9	-13	-16	-21	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-15	-11	-8	-3	-6	-14	-22	-30	
	-18	-12	-8	-5	-4	-11	-15	-21	
16°	-13	-5	-7	-5	-8	-11	-16	-21	
	-14	-6	-7	-5	-7	-11	-13	-17	
24-40°	-5	-5	-8	-7	-9	-13	-16	-21	
	-6	-4	-8	-7	-9	-13	-15	-20	

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0

SK10277



JM AEROFOIL

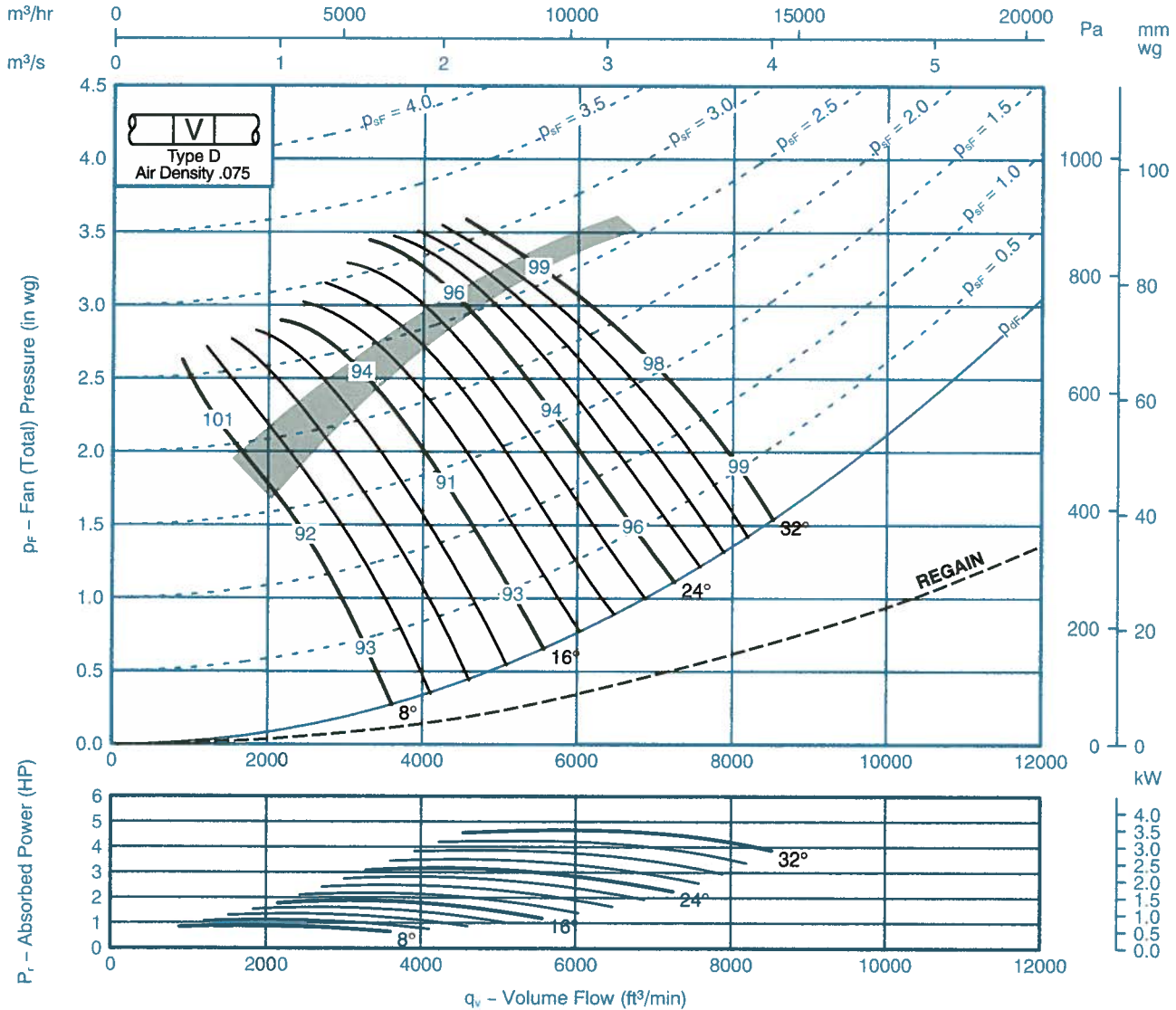
Fan Code: 45JM/20/2/3/...
 450 mm 3500 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-18	-17	-17	-8	-3	-7	-16	-24	
	-15	-11	-13	-7	-6	-6	-12	-14	
16°	-9	-9	-8	-6	-6	-11	-15	-19	
	-11	-7	-10	-7	-7	-9	-14	-17	
24-32°	-8	-5	-9	-7	-10	-12	-16	-19	
	-9	-5	-11	-7	-9	-11	-15	-19	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-15	-15	-15	-8	-3	-6	-15	-22	
	-13	-8	-12	-7	-5	-6	-10	-12	
16°	-8	-8	-7	-6	-6	-11	-15	-18	
	-10	-5	-9	-7	-7	-9	-13	-15	
24-32°	-7	-4	-8	-6	-10	-11	-14	-16	
	-7	-2	-10	-7	-9	-10	-14	-17	

SK10279

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

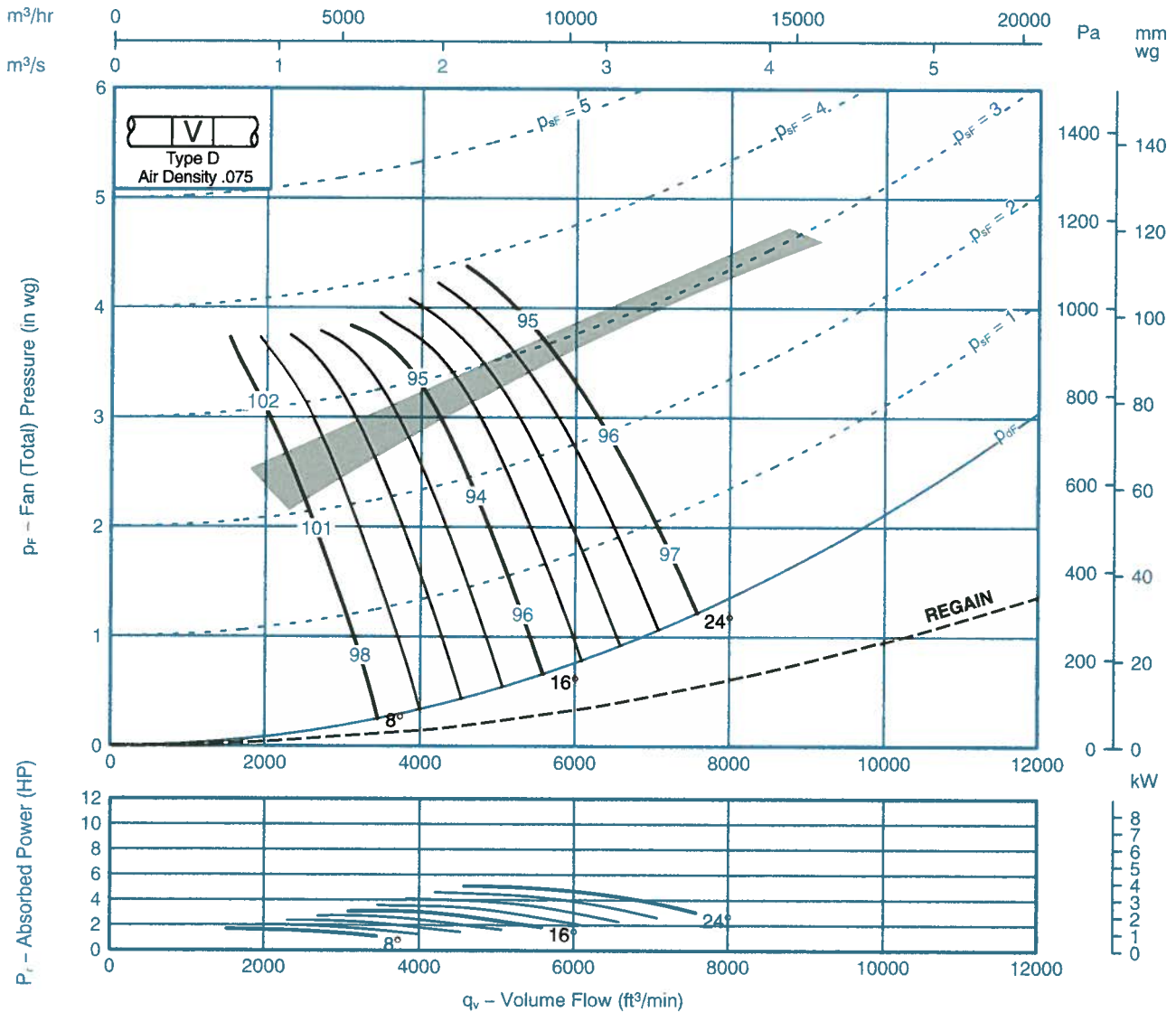
Fan Code: 45JM/20/2/6/...
 450 mm 3500 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-16	-18	-13	-9	-4	-7	-16	-24
	Lower	-17	-19	-14	-8	-5	-5	-12	-17
16°	Upper	-9	-15	-7	-8	-6	-9	-13	-17
	Lower	-12	-16	-8	-8	-6	-7	-11	-14
24°	Upper	-8	-8	-7	-9	-7	-10	-15	-18
	Lower	-8	-9	-7	-9	-8	-9	-14	-17

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-13	-17	-11	-8	-3	-5	-15	-21
	Lower	-15	-19	-12	-8	-5	-4	-11	-15
16°	Upper	-8	-15	-6	-8	-5	-8	-12	-16
	Lower	-10	-15	-6	-7	-6	-7	-11	-13
24°	Upper	-7	-7	-6	-9	-7	-9	-13	-17
	Lower	-6	-9	-5	-8	-8	-9	-13	-16

SK10280

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

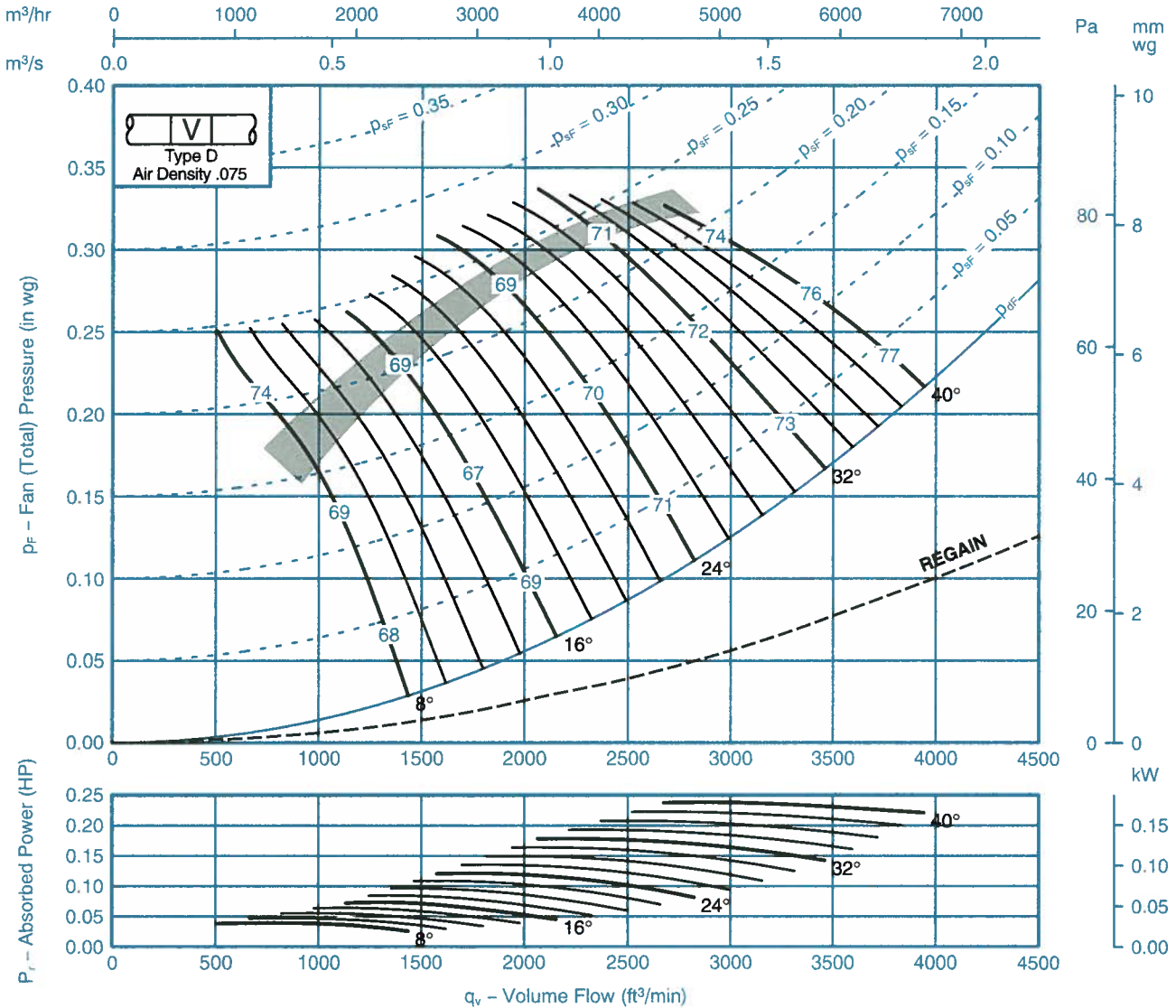
Fan Code: 50JM/16/8/5/...
 500 mm 875 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-8	-9	-4	-7	-13	-20	-27	-36	
	-7	-10	-7	-5	-9	-14	-21	-29	
16°	-6	-9	-5	-7	-11	-17	-24	-31	
	-3	-8	-9	-11	-12	-15	-21	-27	
24-40°	-3	-8	-9	-10	-12	-15	-19	-23	
	-3	-8	-9	-11	-14	-17	-22	-27	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-6	-9	-3	-7	-12	-20	-26	-33	
	-6	-10	-7	-5	-9	-13	-20	-27	
16°	-6	-9	-5	-7	-11	-17	-23	-29	
	-2	-8	-9	-11	-12	-15	-20	-25	
24-40°	-2	-8	-9	-10	-12	-15	-19	22	
	-2	-7	-9	-11	-14	-17	-21	-26	

SK10281

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

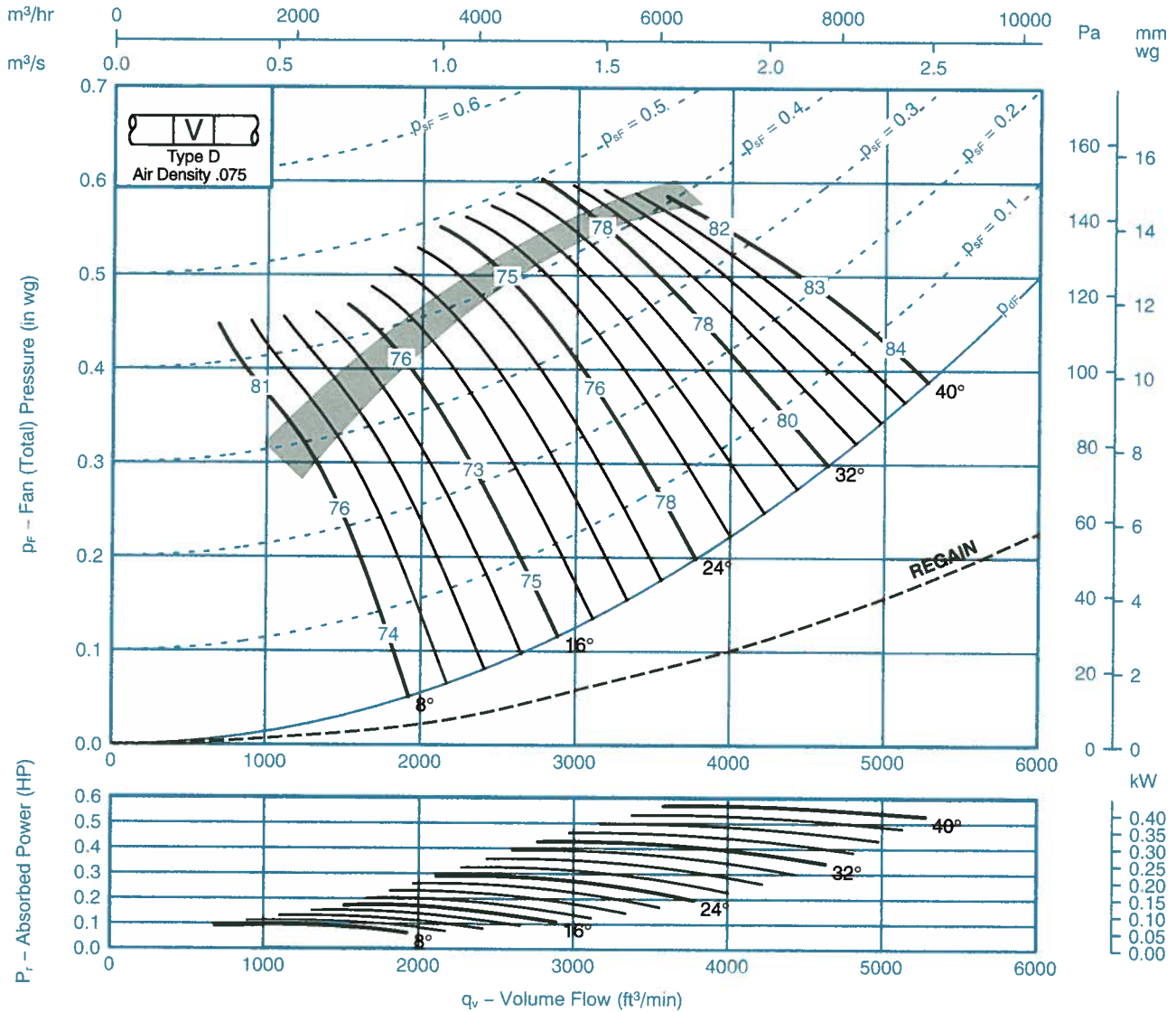
Fan Code: 50JM/16/6/5/...
 500 mm 1170 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-11	-8	-6	-4	-10	-17	-24	-32
	Lower	-13	-7	-9	-5	-7	-12	-17	-25
16°	Upper	-10	-7	-9	-4	-9	-14	-21	-28
	Lower	-8	-4	-8	-9	-11	-13	-18	-24
24-40°	Upper	-5	-5	9	-10	-12	-14	-18	-22
	Lower	-5	-5	-8	-10	-13	-16	-20	-25

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-10	-6	-6	-4	-10	-17	-23	-30
	Lower	-13	-6	-9	-5	-7	-10	-17	-24
16°	Upper	-9	-7	-9	-4	-9	-14	-20	-26
	Lower	-8	-3	-8	-9	-11	-13	-17	-23
24-40°	Upper	-4	-5	-9	-9	-12	-14	-17	-21
	Lower	-5	-4	-8	-10	-13	-15	-19	-24

SK10282

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

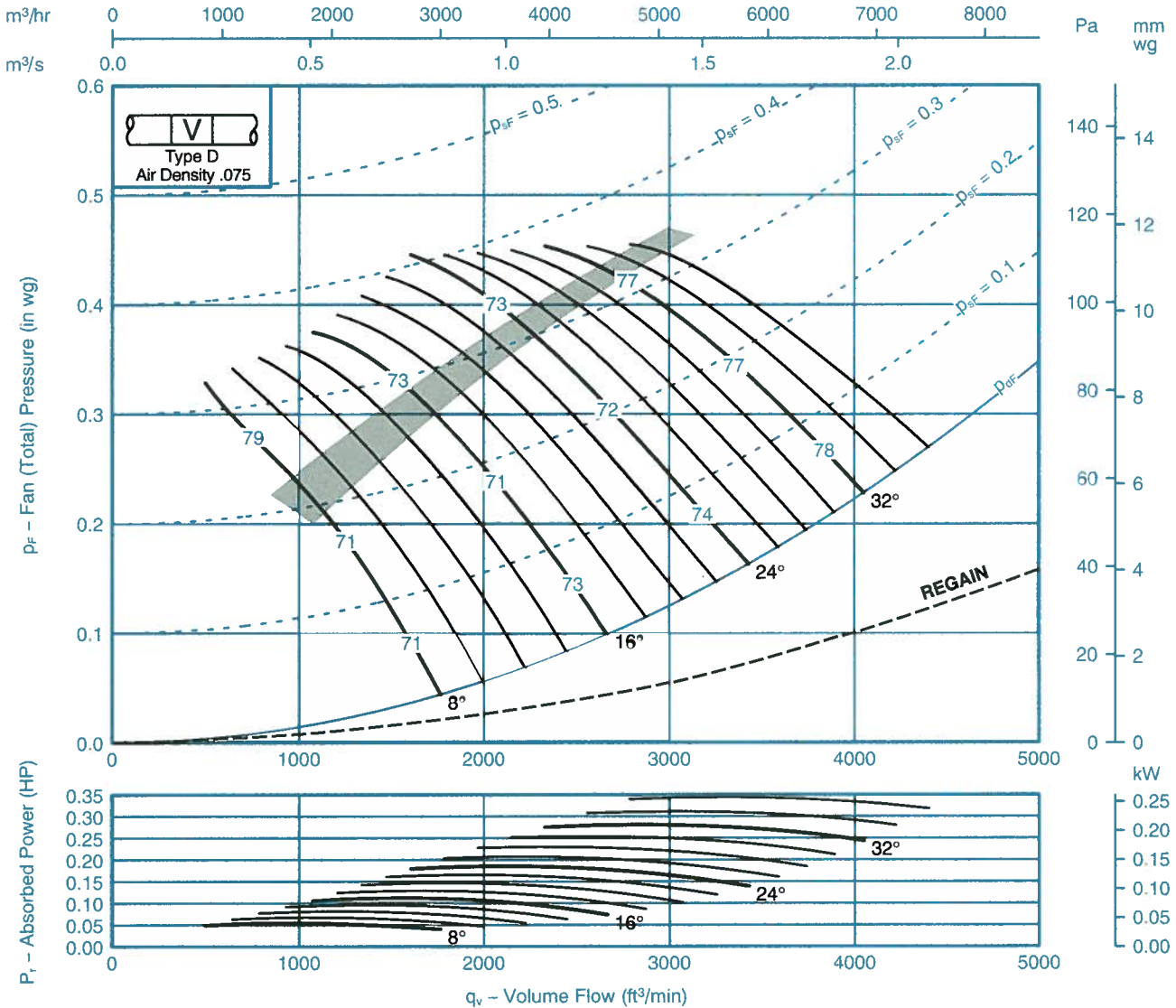
Fan Code: 50JM/20/6/3/...
 500 mm 1170 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-16	-12	-5	-3	-10	-19	-27	-37	
	-8	-9	-6	-6	-9	-13	-16	-20	
16°	-8	-6	-5	-8	-13	-17	-21	-26	
	-5	-7	-6	-9	-12	-17	-19	-24	
24-36°	-5	-6	-7	-10	-12	-16	-19	-23	
	-4	-7	-7	-10	-13	-17	-21	-26	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-13	-12	-5	-3	-10	-19	-26	-35	
	-5	-9	-6	-6	-9	-13	-14	-18	
16°	-6	-6	-5	-8	-13	-16	-20	-25	
	-3	-7	-6	-8	-12	-16	-18	-23	
24-36°	-3	-6	-7	-9	-12	-15	-17	-21	
	-1	-7	-7	-10	-13	-17	-20	-24	

SK10283

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

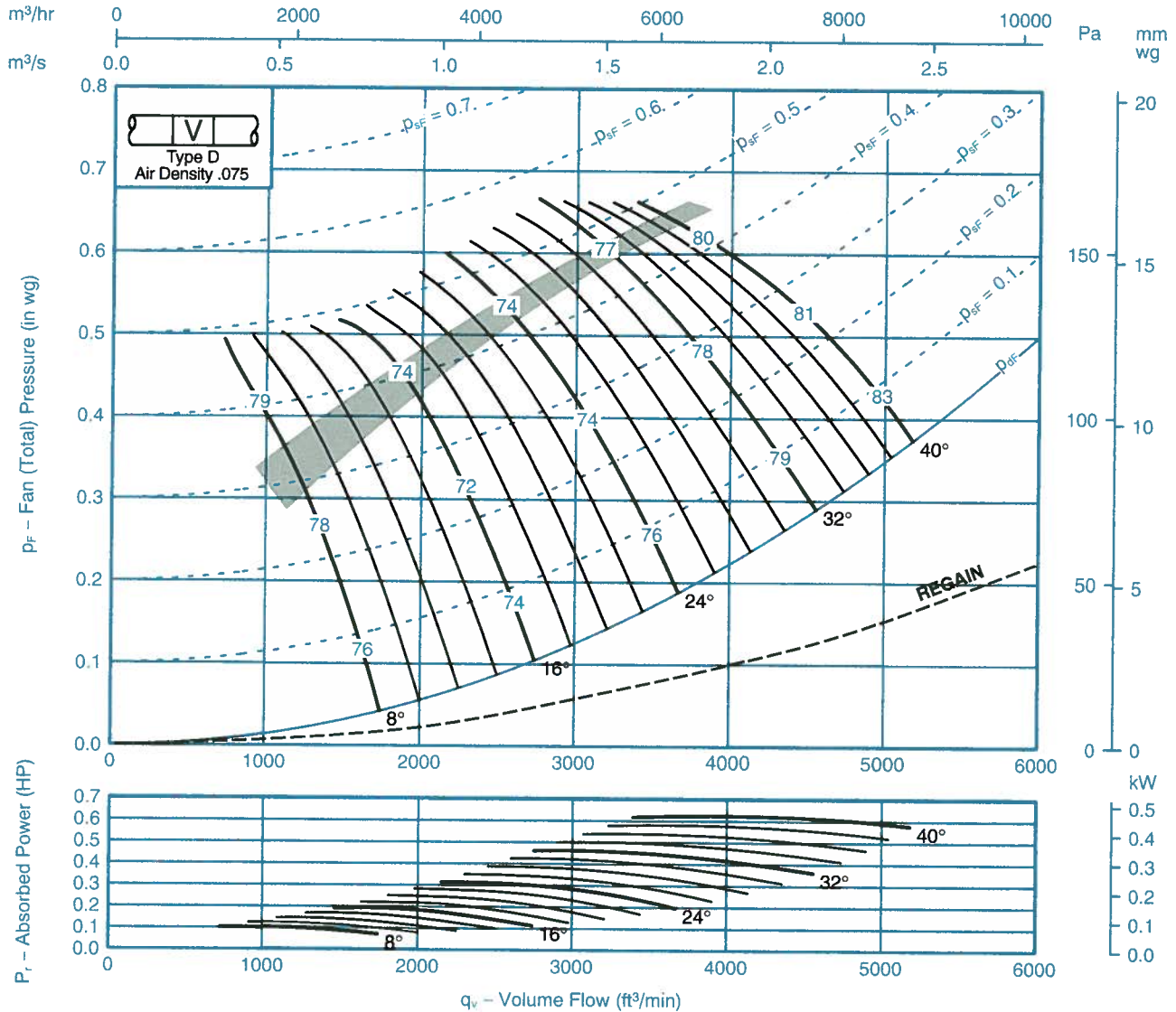
Fan Code: 50JM/20/6/6/...
 500 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-18	-11	-7	-3	-9	-17	-26	-36
	Lower	-18	-11	-6	-4	-7	-14	18	-25
16°	Upper	-13	-6	-5	-7	-10	-15	-20	-26
	Lower	-13	-5	-6	-7	-10	-13	-16	-20
24-40°	Upper	-6	-5	-7	-9	-12	-15	-19	-23
	Lower	-7	-5	-7	-9	-12	-15	-19	-23

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-15	-9	-6	-3	-9	-17	-25	-35
	Lower	-17	-8	-6	-4	-7	-13	-17	-23
16°	Upper	-12	-4	-5	-6	-10	-14	-20	-25
	Lower	-12	-3	-6	-7	-10	-13	-16	-19
24-40°	Upper	-5	-4	-6	-9	-11	-14	-17	-21
	Lower	-5	-3	-7	-9	-12	-15	-18	-22

SK10284

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

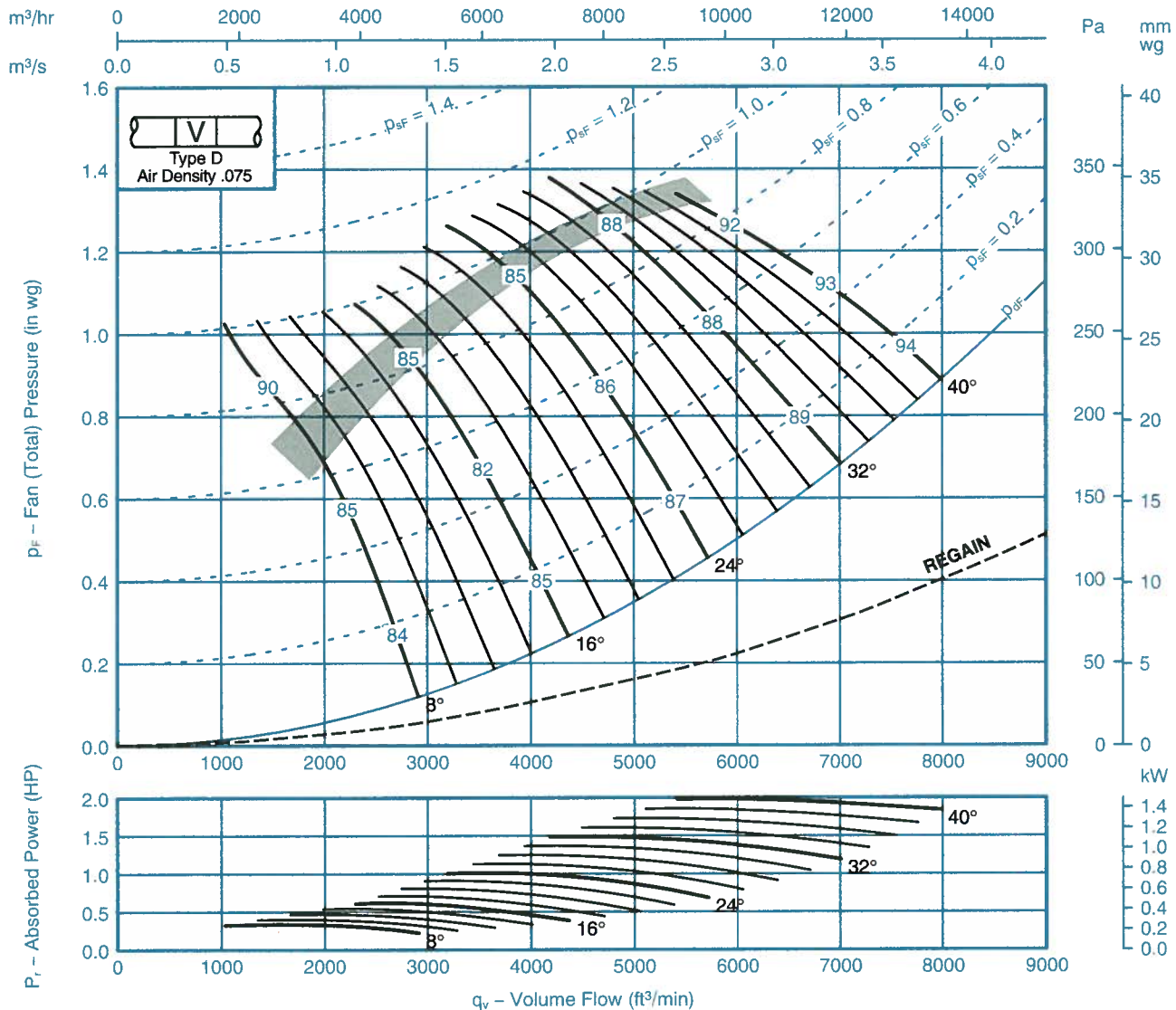
Fan Code: 50JM/16/4/5/...
 500 mm 1770 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-15	-9	-10	-4	-8	-13	-21	-28	
	-15	-7	-10	-7	-6	-9	-14	-21	
16°	-13	-7	-10	-6	-8	-11	-18	-25	
	-12	-3	-9	-10	-11	-12	-15	-21	
24-40°	-6	-5	-10	-11	-12	-14	-17	-21	
	-7	-4	-9	-11	-12	-15	-18	-23	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-13	-6	-9	-4	-7	-12	-20	-25	
	-15	-6	-10	-7	-5	-8	-13	-19	
16°	-12	-7	-9	-5	-7	-11	-16	-22	
	-11	-3	-8	-9	-11	-12	-14	-19	
24-40°	-5	-4	-9	-11	-12	-14	-16	-19	
	-6	-3	-9	-10	-12	-15	-17	-21	

SK10285

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

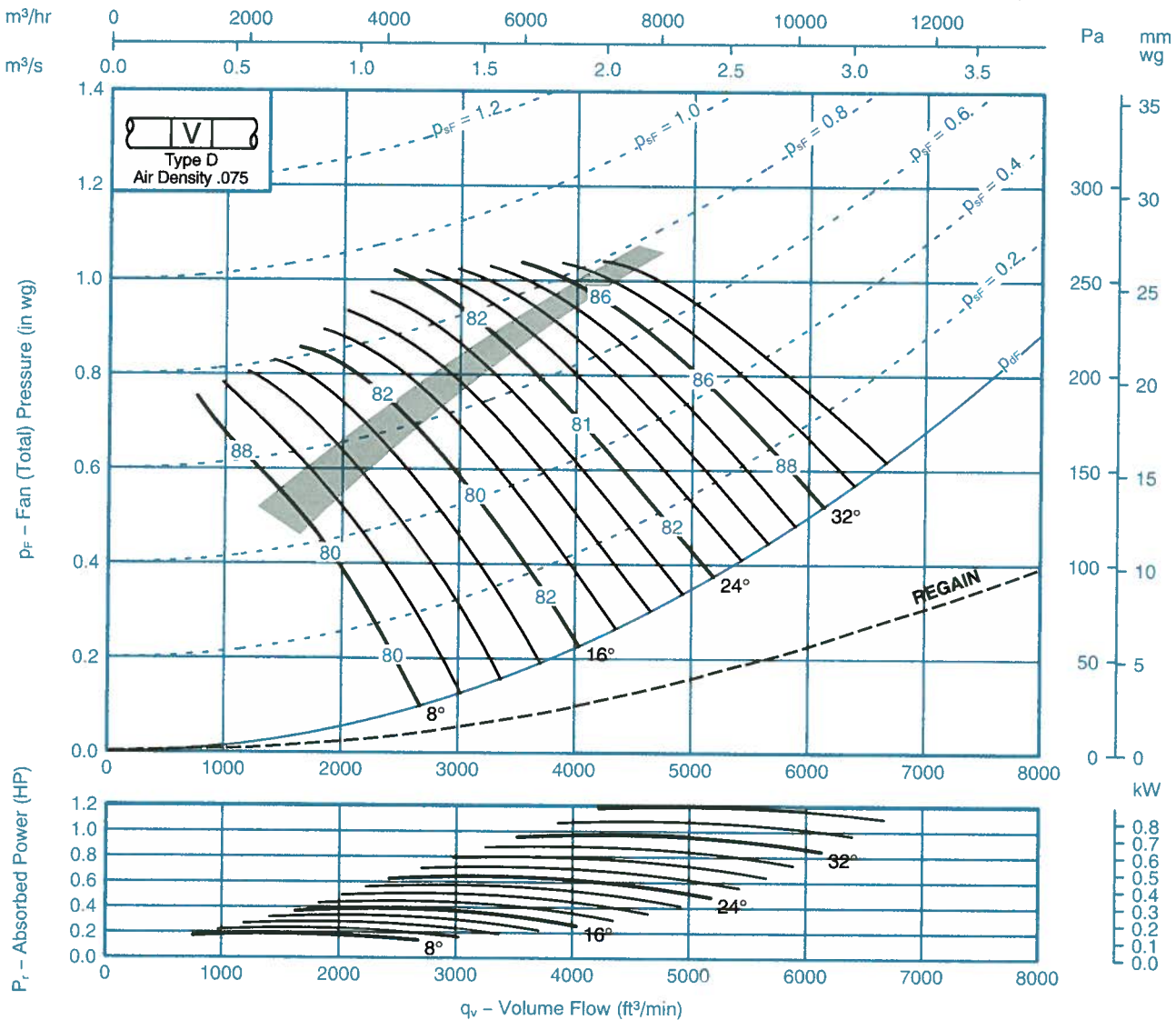
Fan Code: 50JM/20/4/3/...
 500 mm 1770 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-17	-9	-3	-5	-14	-22	-31
	-9	-12	-7	-6	-6	-12	-14	-18
16°	-9	-8	-5	-6	-10	-15	-18	-23
	-6	-10	-6	-7	-10	-14	-17	-21
24-36°	-5	-9	-6	-9	-10	-14	-18	-21
	-4	-10	-6	-8	-11	-15	-19	-23

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-14	-16	-9	3	-5	-13	-22	-29
	-6	-11	-7	-6	-6	-11	-12	-15
16°	-7	-8	-5	-6	-10	-15	-17	-22
	-3	-9	-6	-7	-9	-14	-16	-20
24-36°	-3	-8	-6	-8	-10	-13	-16	-19
	-1	-9	-6	-8	-11	-14	-17	-21

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0

SK10286



JM AEROFOIL

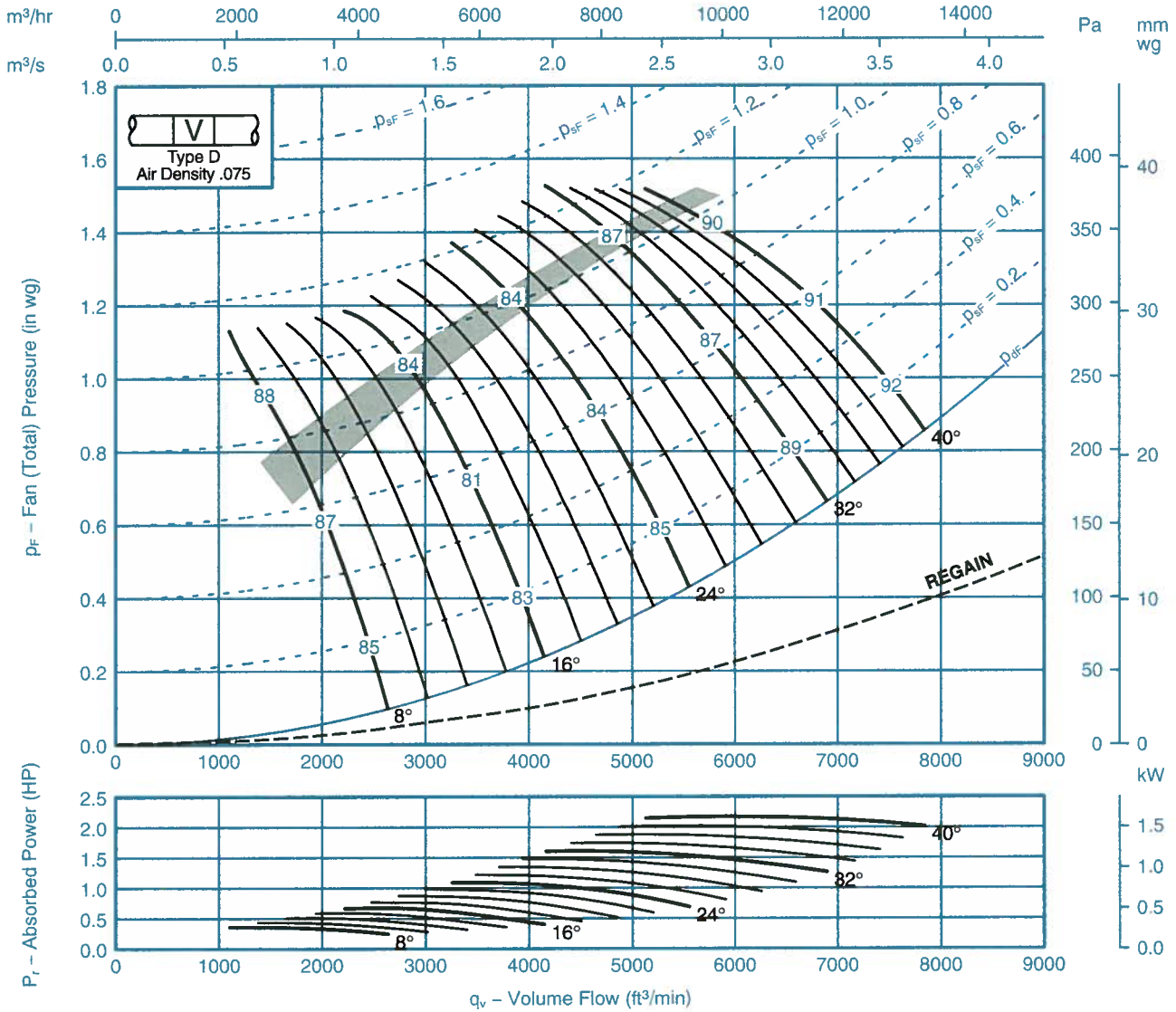
Fan Code: 50JM/20/4/6/...
 500 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-20	-13	-11	-4	-4	-13	-21	-30
	Lower	-19	-12	-9	-6	-4	-11	-15	-21
16°	Upper	-15	-6	-8	-5	-7	-12	-17	-23
	Lower	-14	-6	-8	-6	-7	-12	-14	-18
24-40°	Upper	-7	-5	-9	-8	-10	-14	-17	-21
	Lower	-7	-5	-9	-8	-10	-14	-17	-21

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-18	-11	-10	-4	-4	-12	-21	-29
	Lower	-18	-10	-8	-6	-4	-10	-14	-19
16°	Upper	-14	-5	-8	-5	-7	-12	-16	-22
	Lower	-13	-4	-7	-6	-7	-12	-14	-17
24-40°	Upper	-5	-4	-9	-7	-10	-13	-15	-19
	Lower	-5	-3	-8	-8	-10	-14	-16	-20

SK10287

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

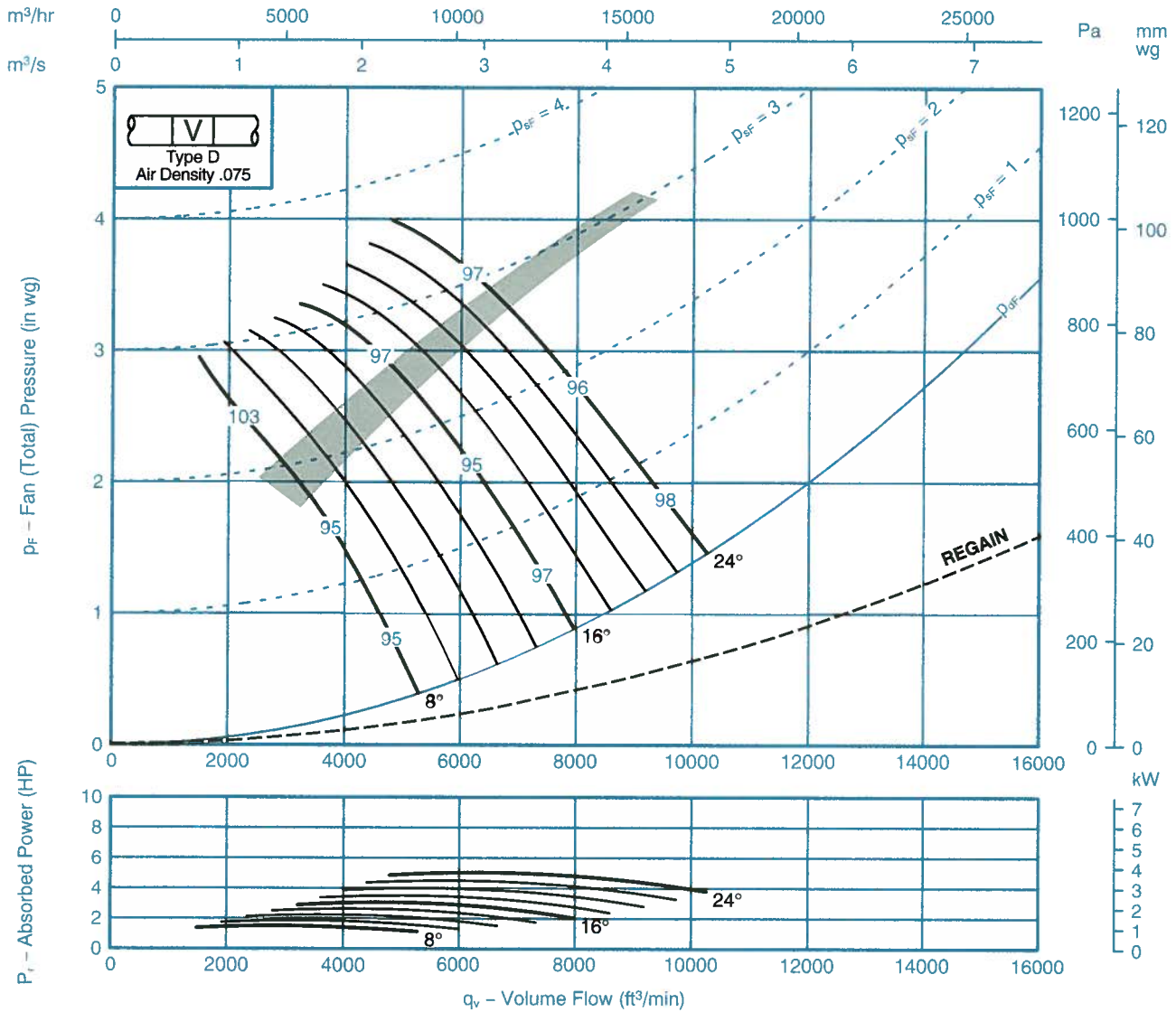
Fan Code: 50JM/20/2/3/...
 500 mm 3500 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-20	-17	-17	-9	-4	-6	15	-23
	-14	-9	-13	-7	-6	-7	-12	-14
16°	-11	-10	-9	-6	-6	-11	-16	-19
	-11	-6	-11	-7	-7	-10	-15	-18
24°	-9	-6	-10	-7	-10	-11	-15	-18
	-9	-5	-11	-7	-9	-11	-16	-19

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-15	-16	-9	-3	-4	-13	-20
	-13	-6	-12	-7	-6	-6	-10	-11
16°	-9	-8	-8	-5	-6	-10	-15	-18
	-9	-4	-10	-6	-7	-10	-14	-16
24°	-7	-4	-9	-6	-9	-10	-13	-16
	-7	-2	-10	-7	-9	-10	-15	-17

SK10288

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

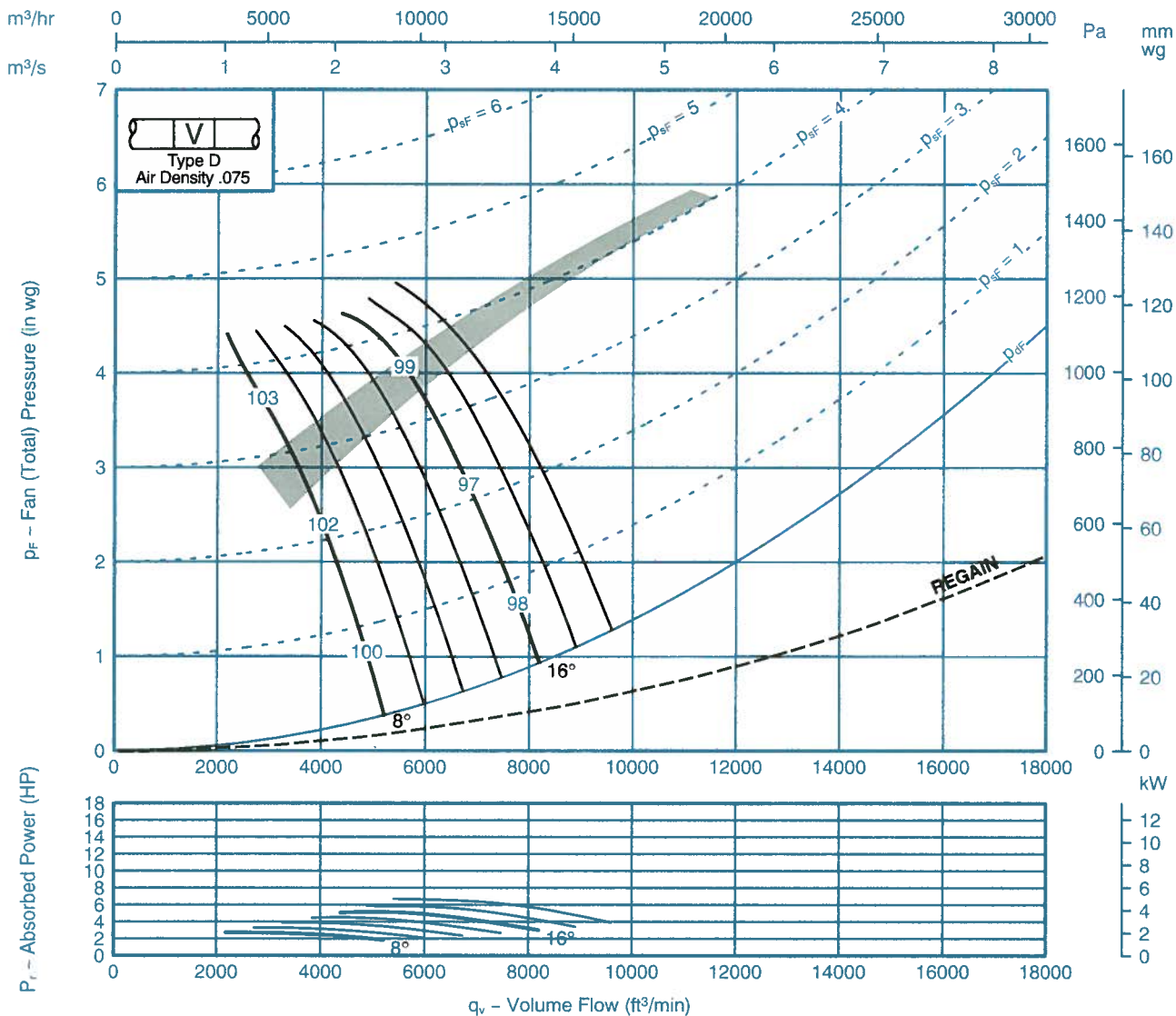
Fan Code: 50JM/20/2/6/...
 500 mm 3500 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-18	-21	-14	-11	-5	-5	-13	-22	
	-16	-20	-13	-9	-6	-4	-11	-16	
16-20°	-10	-16	-7	-9	-6	-8	-13	-17	
	-10	-15	-7	-8	-7	-8	-12	-15	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-14	-20	-11	-10	-4	-3	-12	-20	
	-14	-20	-11	-8	-6	-3	-10	-14	
16-20°	-8	-16	-5	-8	-5	-7	-12	-16	
	-8	-14	-5	-8	-6	-8	-12	-14	

SK10289

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-10	-5	-2	0	0	0	0	0



JM AEROFOIL

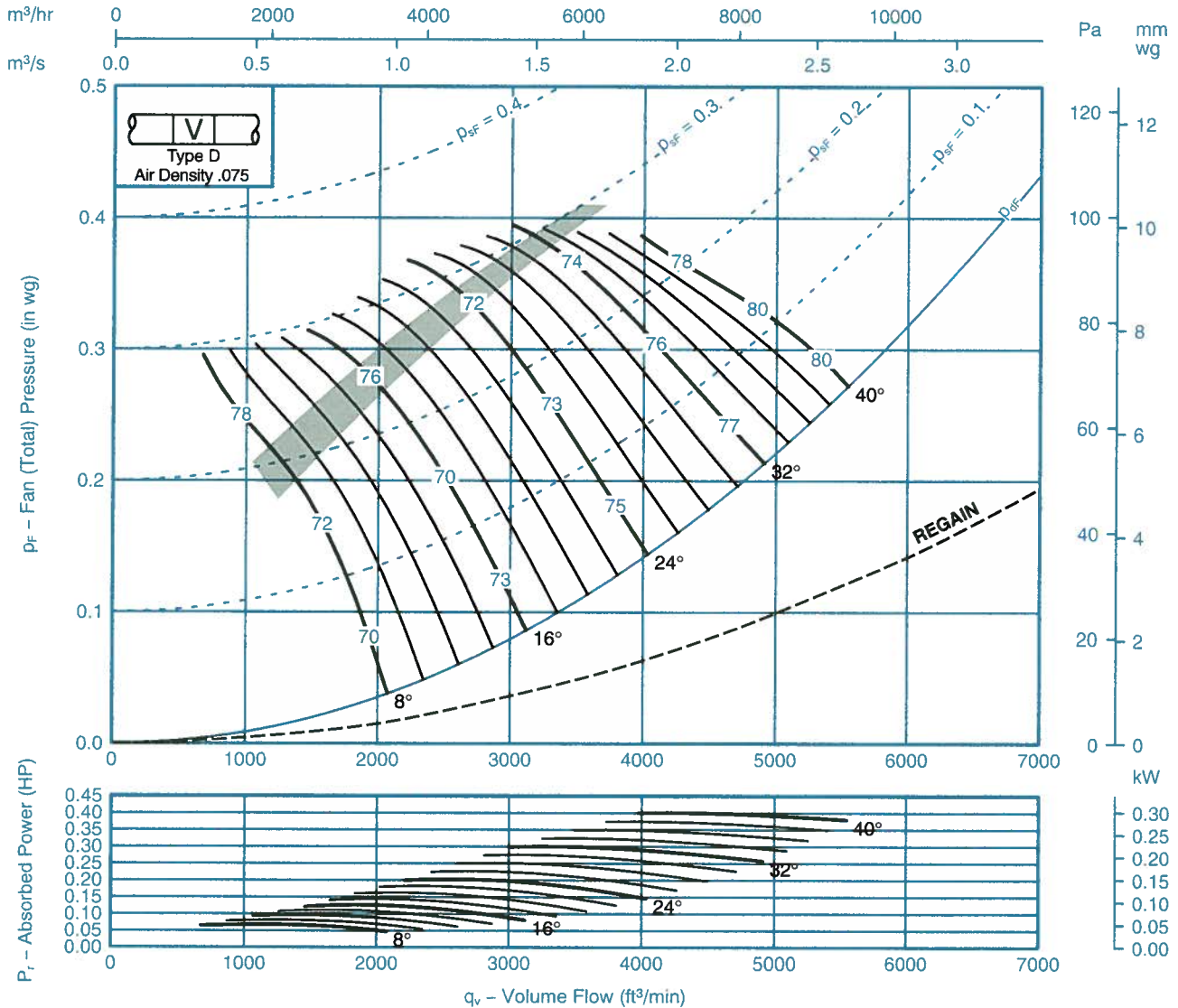
Fan Code: 56JM/16/8/5/...
 560 mm 875 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-11	-11	-3	-6	-11	-19	-26	-35	
	-7	-11	-7	-5	-8	-13	-19	-27	
16°	-11	-12	-3	-6	-11	-18	-25	-33	
	-3	-9	-8	-11	-13	-15	-20	-27	
24-40°	-3	-9	-7	-10	-12	-15	-19	-23	
	-2	-8	-8	-11	-14	-17	-22	-27	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-9	-10	-3	-6	-11	-19	-25	-33	
	-6	-11	-7	-5	-8	-12	-19	-26	
16°	-10	-12	-3	-6	-11	-18	-24	-32	
	-3	-8	-8	-11	-13	-15	-20	-25	
24-40°	-3	-9	-7	-10	-12	-15	-18	-22	
	-2	-8	-8	-11	-14	-17	-21	-25	

SK10290

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-9	-5	-2	0	0	0	0	0



JM AEROFOIL

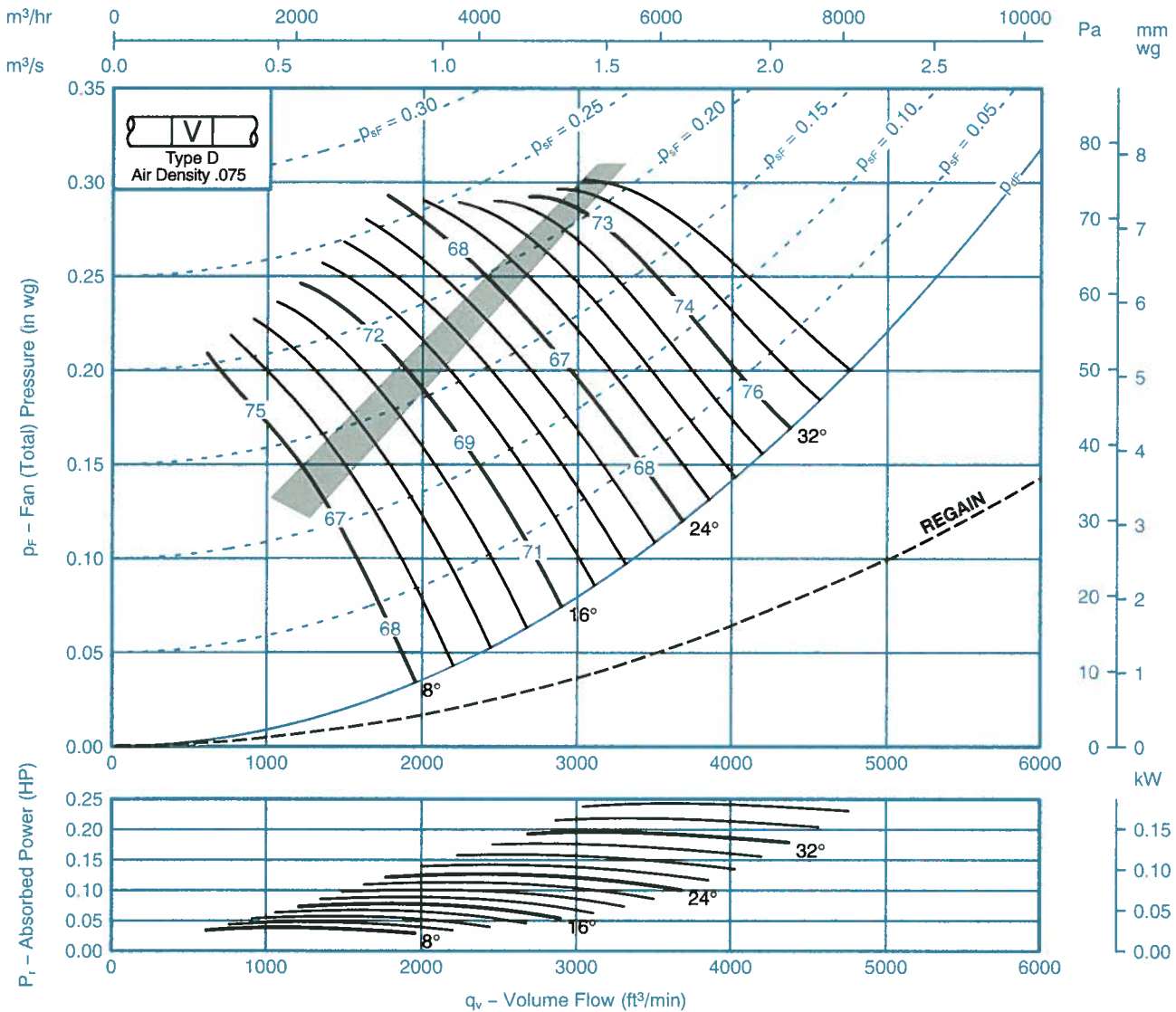
Fan Code: 56JM/20/8/3/...
 560 mm 875 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-15	-10	-4	-4	-13	-21	-30	-40
	Lower	-5	-7	-7	-7	-12	-14	-17	-21
16°	Upper	-6	-5	-6	-10	-16	-18	-22	-27
	Lower	-4	-6	-8	-10	-16	-18	-22	-27
24-36°	Upper	-5	-6	-8	-9	-14	-17	-21	-25
	Lower	-3	-6	-8	-10	-16	-19	-23	-28

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-12	-9	-4	-4	-13	-21	-29	-38
	Lower	-3	-7	-7	-7	-12	-13	-15	-19
16°	Upper	-4	-5	-6	-10	-16	-18	-21	-26
	Lower	-2	-6	-8	-10	-16	-18	-21	-26
24-36°	Upper	-3	-5	-8	-9	-13	-16	-19	-23
	Lower	0	-6	-8	-10	-16	-18	-22	-26

SK10291

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-9	-5	-2	0	0	0	0	0



JM AEROFOIL

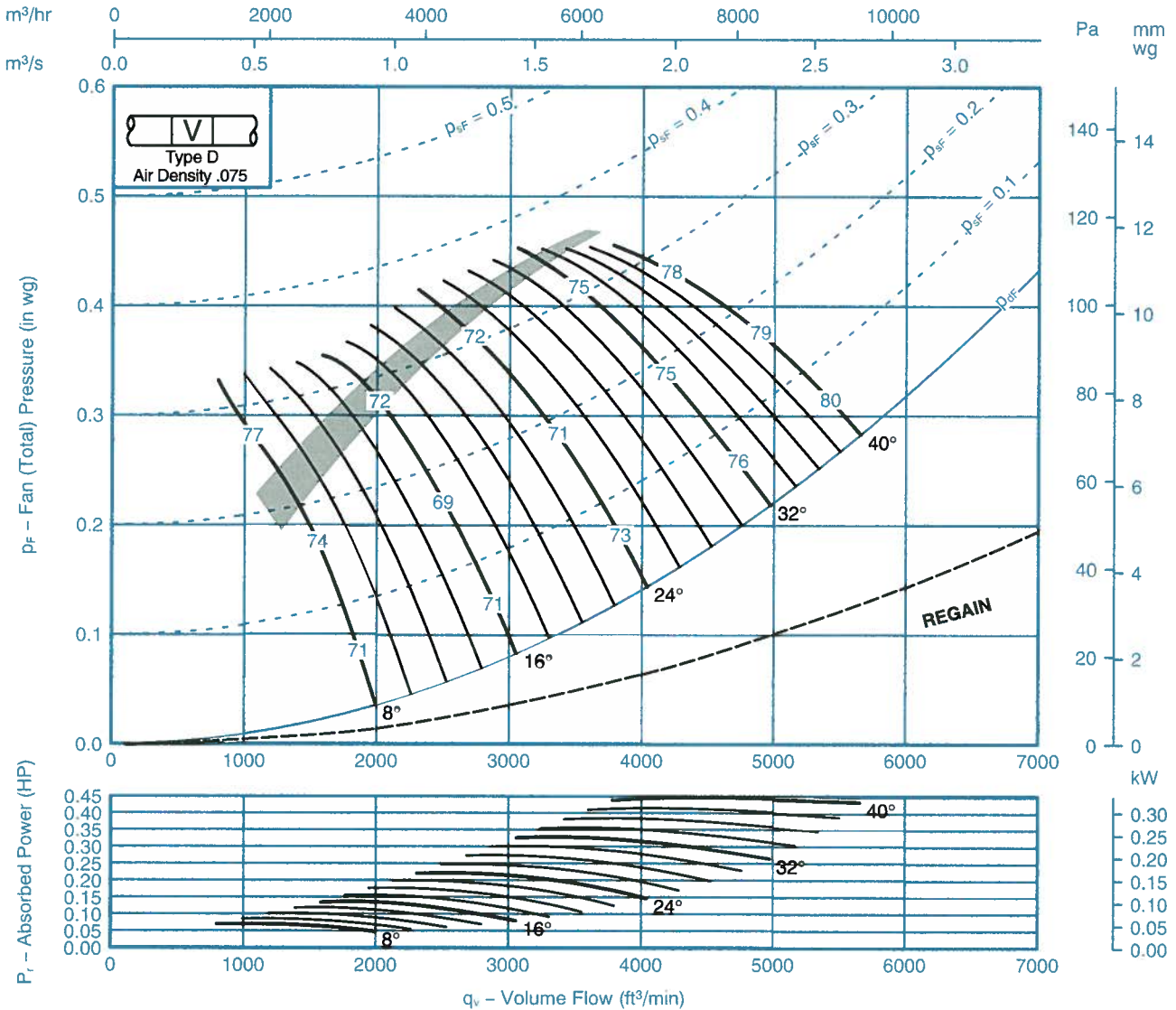
Fan Code: 56JM/20/8/6/...
 560 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-13	-14	-6	-3	-11	-20	-29	-40	
	-11	-10	-7	-3	-10	-15	-20	-26	
16°	-6	-9	-5	-7	-13	-17	-24	-31	
	-5	-8	-6	-8	-13	-15	-18	-23	
24-40°	-4	-9	-7	-10	-12	-15	-18	-22	
	-3	-8	-7	-10	-13	-17	-21	-25	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-11	-13	-6	-3	-11	-20	-29	-38	
	-9	-9	-7	-3	-10	-14	-19	-24	
16°	-4	-9	-5	-7	-12	-17	-23	-30	
	-3	-7	-6	-8	-13	-15	-18	-22	
24-40°	-2	-8	-7	-9	-12	-14	-17	-20	
	-1	-7	-7	-10	-13	-16	-20	-24	

SK10292

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-9	-5	-2	0	0	0	0	0



JM AEROFOIL

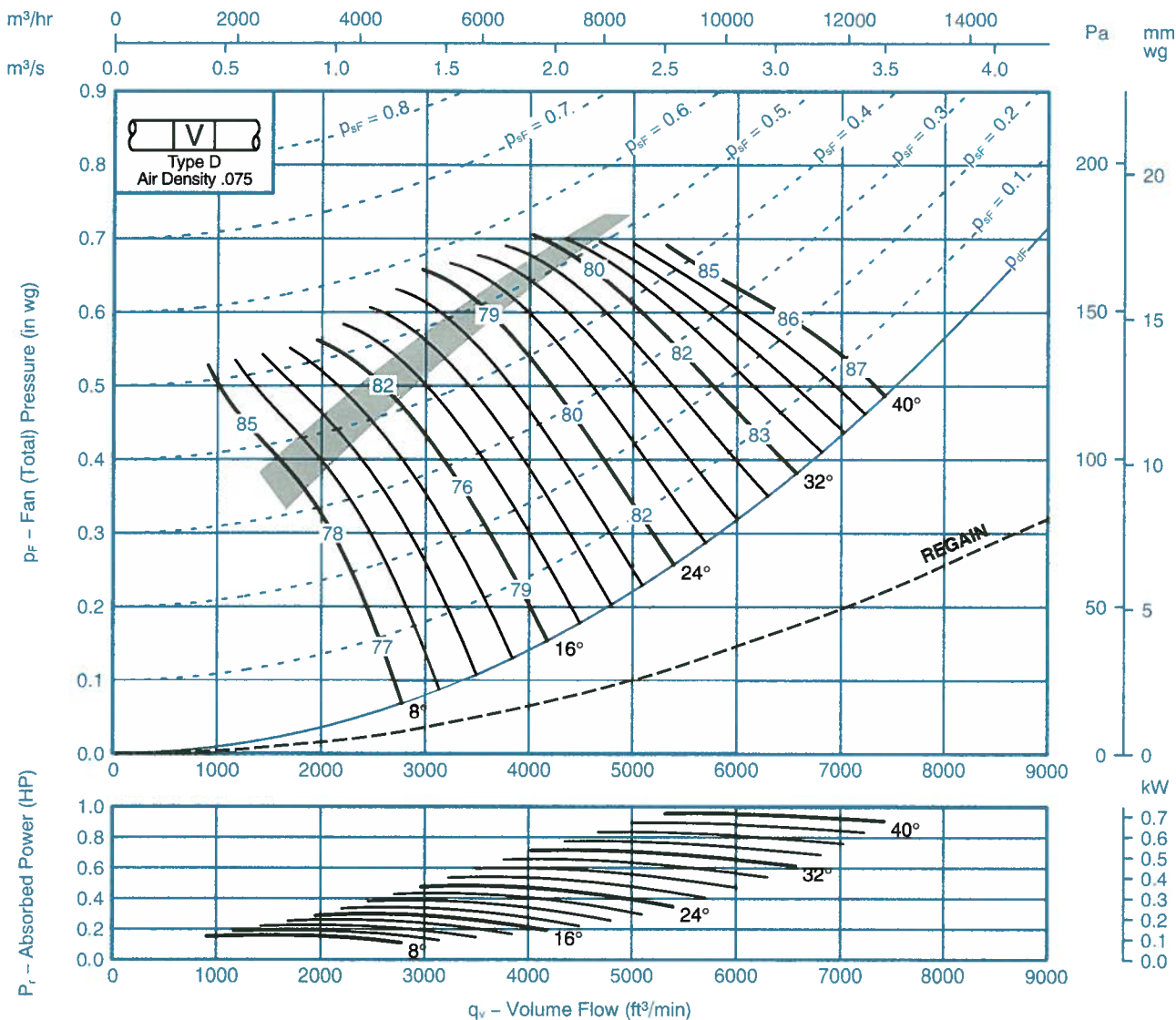
Fan Code: 56JM/16/6/5/...
 560 mm 1170 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-14	-11	-6	-4	-8	-16	-23	-31
	-13	-8	-9	-5	-6	-11	-16	-24
16°	-14	-11	-6	-3	-8	-15	-22	-30
	-9	-4	-7	-9	-11	-14	-17	-24
24-40°	-7	-5	-8	-8	-11	-14	-17	-21
	-6	-4	-8	-9	-13	-16	-20	-25

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-13	-9	-6	-4	-8	-16	-22	-29
	-13	-6	-9	-5	-6	-10	-15	-23
16°	-14	-11	-6	-3	-8	-15	-21	-28
	-8	-4	-7	-9	-11	-14	-17	-23
24-40°	-5	-5	-8	-8	-11	-14	-16	-20
	-5	-4	-8	-9	-13	-16	-19	-23

SK10293

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-9	-5	-2	0	0	0	0	0



JM AEROFOIL

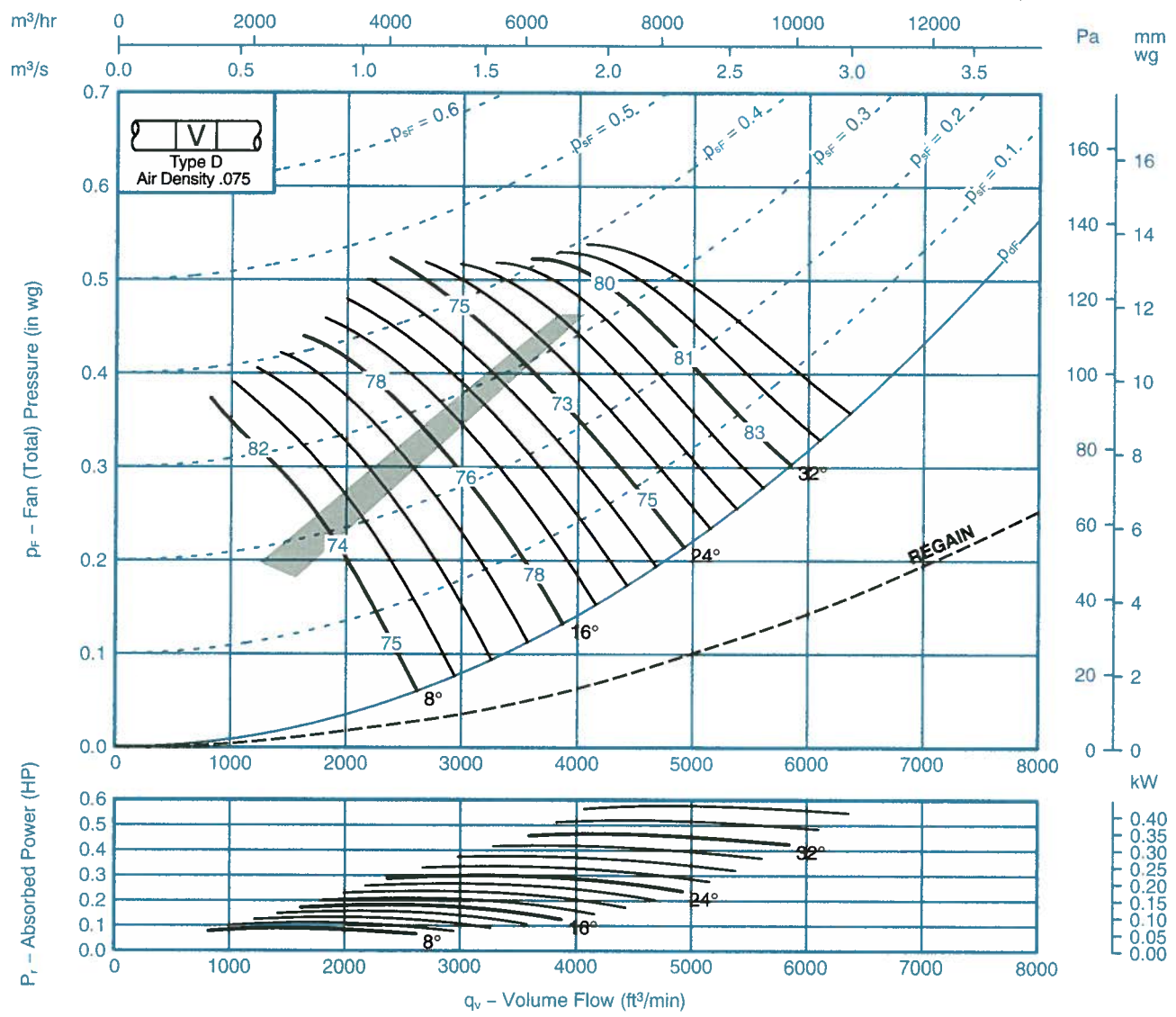
Fan Code: 56JM/20/6/3/...
 560 mm 1170 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-17	-11	-6	-2	-11	-19	-27	-37	
	-6	-8	-7	-7	-10	-14	-16	-20	
16°	-7	-5	-5	-9	-15	-18	-21	-26	
	-5	-6	-6	-9	-14	18	-20	-25	
24-36°	-6	-6	-7	-9	-12	-16	-19	-24	
	-4	-6	-7	-10	-14	-18	-21	-27	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-14	-11	-6	-2	-11	-19	-26	-35	
	-3	-8	-7	-7	-10	-13	-14	-17	
16°	-5	-5	-5	-9	-14	-17	-20	-25	
	-2	-6	-6	-9	-14	-18	-19	-24	
24-36°	-4	-5	-7	-8	-11	-15	-17	-21	
	-1	-6	-7	-10	-14	-17	-20	-25	

SK10294

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-9	-5	-2	0	0	0	0	0



JM AEROFOIL

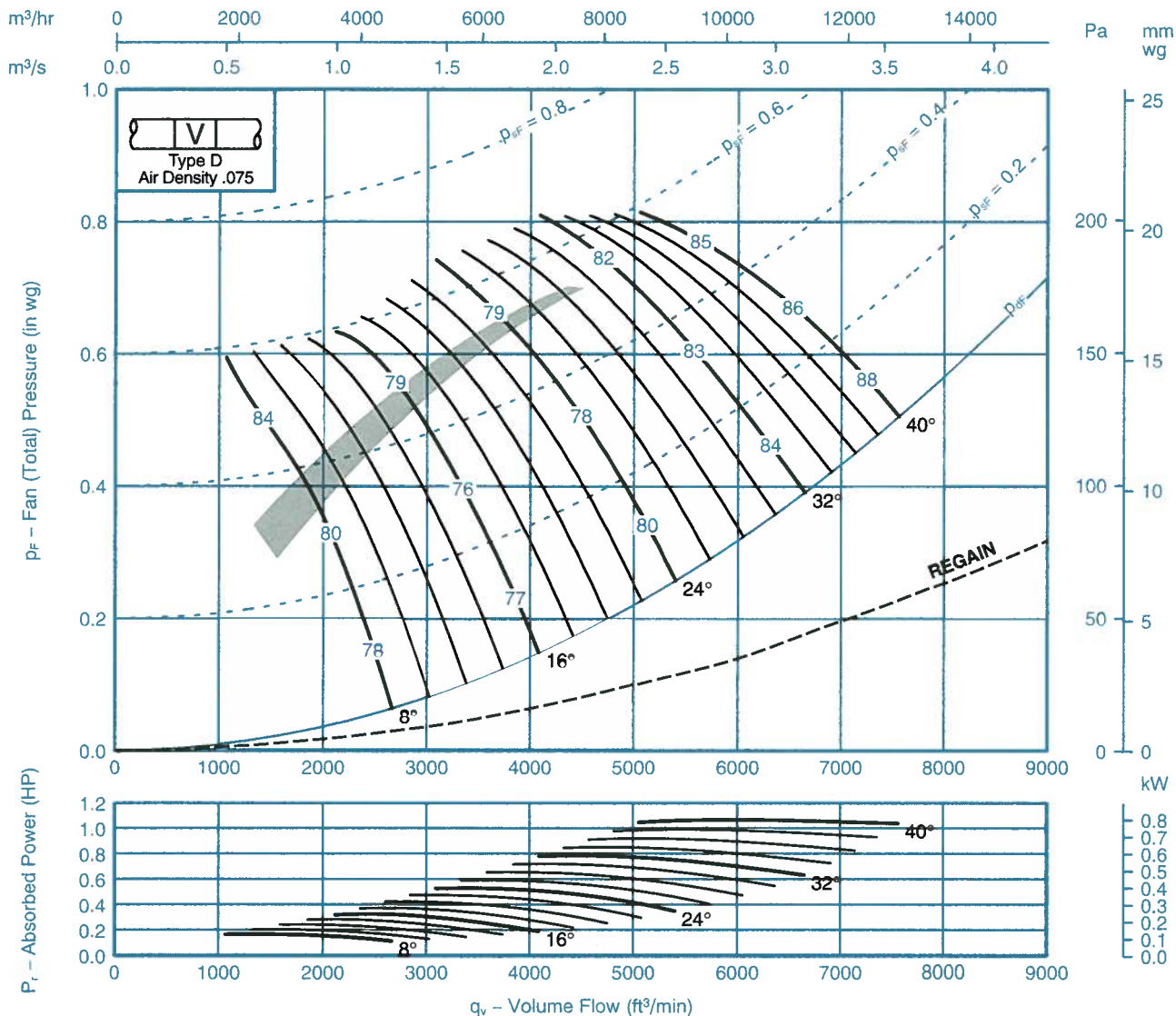
Fan Code: 56JM/20/6/6/...
 560 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-23	-12	-10	-2	-8	-17	-26	-37	
	-20	-9	-8	-4	-8	-14	-18	-24	
16°	-15	-6	-5	-6	-11	-16	-21	-29	
	-13	-4	-6	-7	-11	-14	-17	-22	
24-40°	-7	-5	-7	-10	-12	-15	-18	-21	
	-6	-5	-8	-10	-13	-16	-20	-24	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-20	-10	-10	-2	-8	-17	-26	-35	
	-18	-7	-8	-3	-8	-13	-17	-23	
16°	-14	-4	-5	-6	-11	-16	-21	-28	
	-11	-2	-6	-7	-11	-14	-17	-21	
24-40°	-5	-4	-7	-9	-11	-14	-16	-20	
	-4	-3	-8	-10	-13	-16	-19	-23	

SK10295

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-9	-5	-2	0	0	0	0	0



JM AEROFOIL

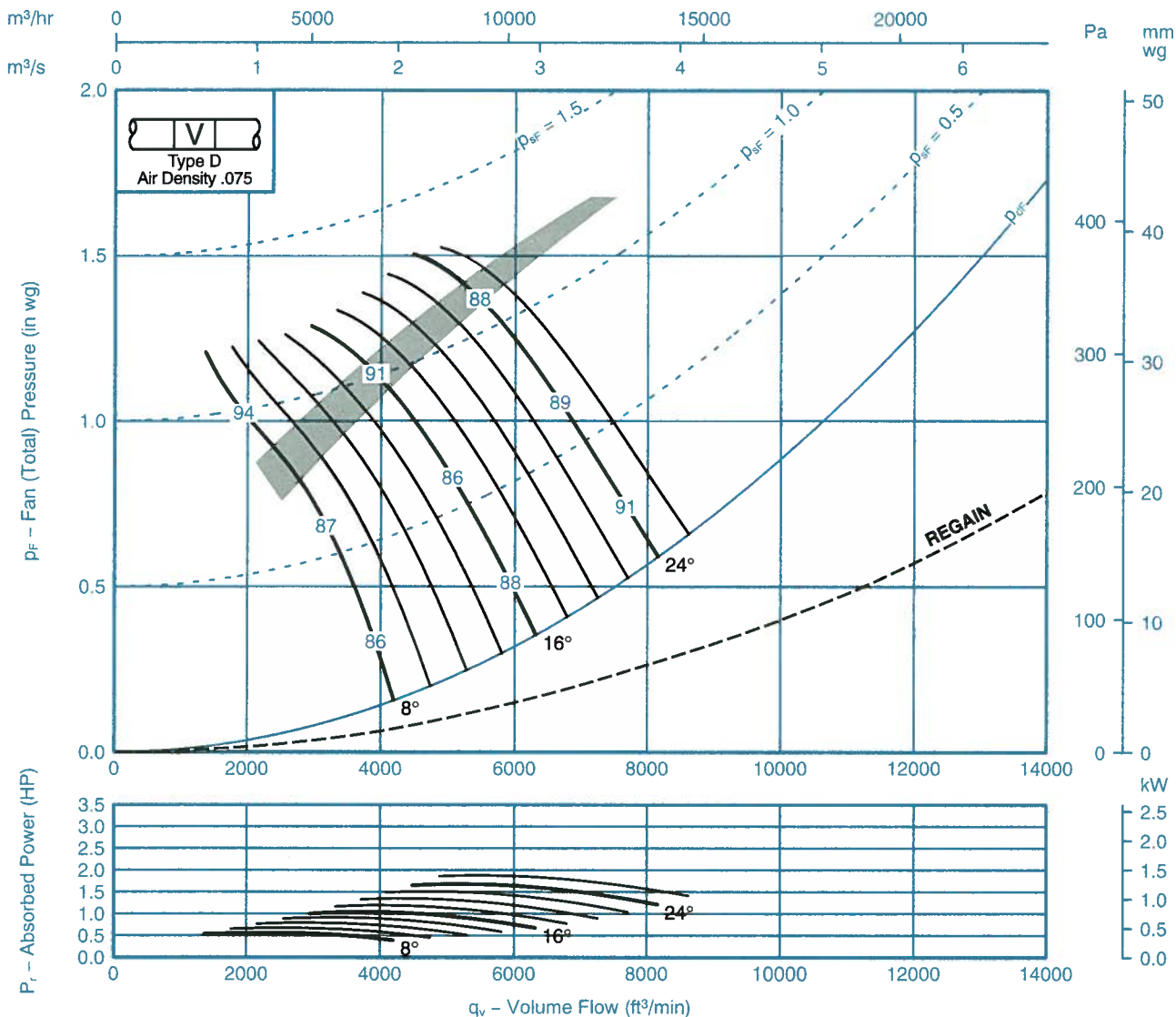
Fan Code: 56JM/16/4/5/...
 560 mm 1770 RPM
 5 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-18	-12	-11	-3	-7	-11	-19	-26
	-17	-7	-11	-7	-6	-8	-13	-19
16°	-17	-11	-12	-3	-6	-11	-18	-25
	-12	-3	-9	-8	-11	-13	-16	-21
24-26°	-7	-4	-10	-8	-11	-13	-16	-20
	-7	-4	-9	-9	-12	-15	-18	-23

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-10	-11	-3	-6	-11	-18	-24
	-17	-6	-11	-7	-6	-7	-12	-18
16°	-16	-11	-13	-3	-6	-11	-17	-24
	-12	-3	-9	-8	-11	-12	-15	-19
24-26°	-6	-4	-10	-8	-11	-13	-15	-18
	-6	-3	-9	-9	-12	-15	-17	-21

SK10296

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-9	-5	-2	0	0	0	0	0



JM AEROFOIL

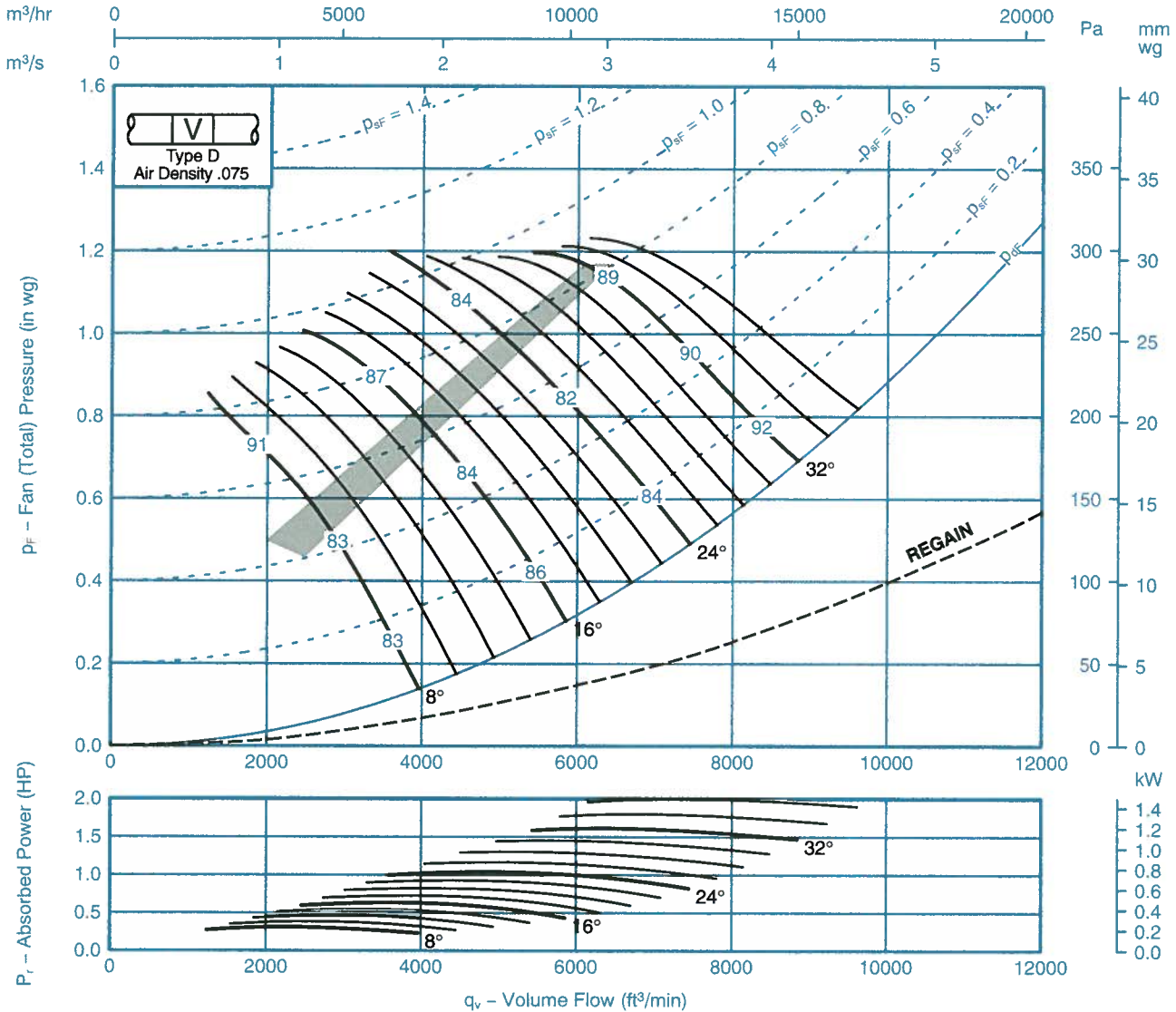
Fan Code: 56JM/20/4/3/...
 560 mm 1770 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-17	-10	-4	-4	-14	-22	-30
	-6	-12	-7	-7	-7	-12	-14	-17
16°	-7	-9	-5	-6	-11	-16	-18	-23
	-4	-10	-6	-8	-11	-16	-18	-22
24-36°	-5	-9	-6	-9	-9	-14	-17	-21
	-4	-10	-7	-9	-11	-17	-19	-24

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-14	-16	-10	-4	-4	-13	-21	-28
	-3	-11	-7	-7	-7	-11	-12	-15
16°	-5	-9	-5	-6	-10	-16	-18	-22
	-2	-9	-6	-8	-11	-16	-18	-21
24-36°	-3	-9	-6	-8	-9	-13	-15	-19
	-1	-9	-7	-9	-11	-16	-18	-22

SK10297

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-9	-5	-2	0	0	0	0	0



JM AEROFOIL

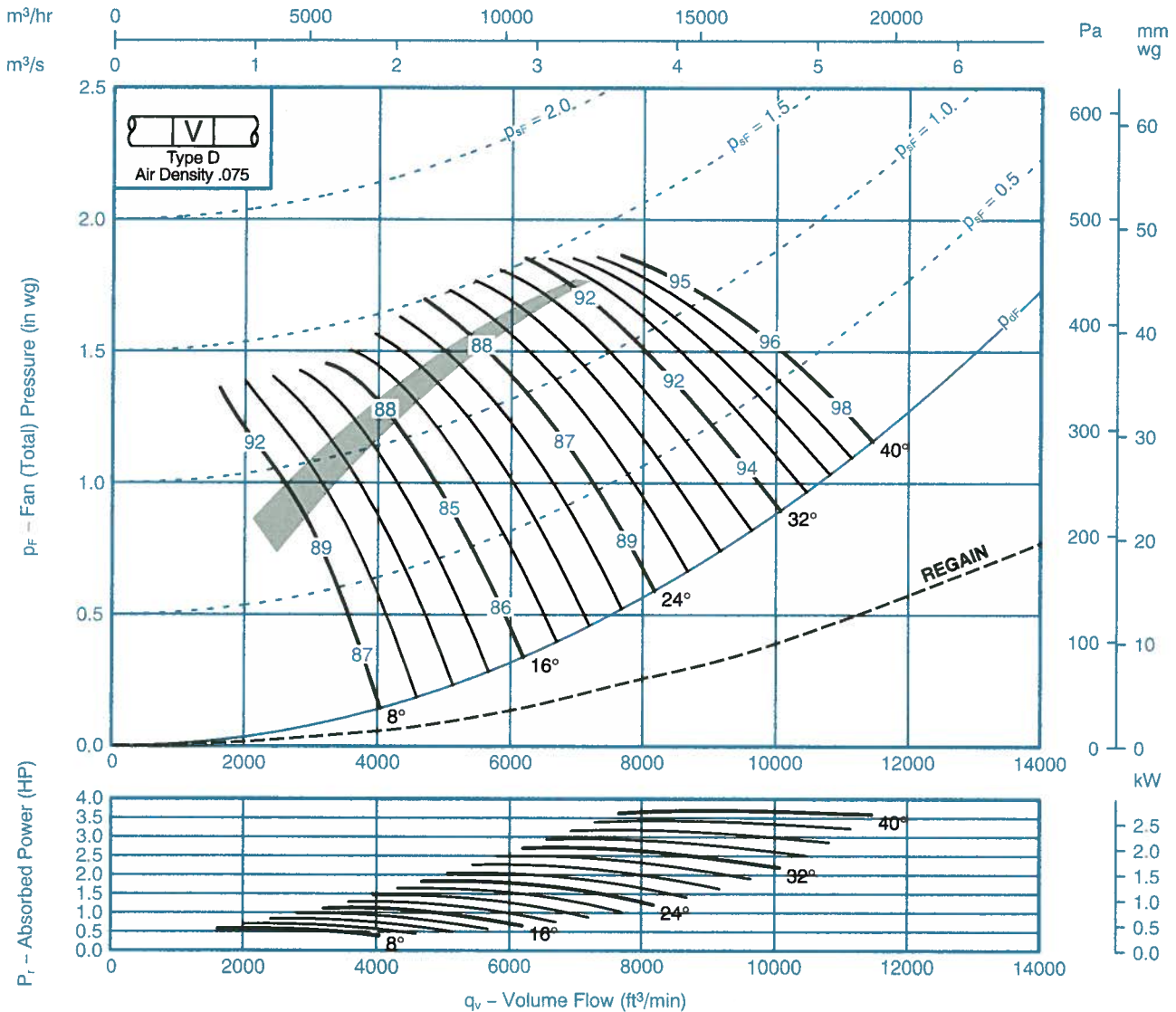
Fan Code: 56JM/20/4/6/...
 560 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-24	-12	-14	-5	-3	-11	-20	-30
	-21	-11	-10	-7	-4	-10	-15	-20
16°	-17	-6	-9	-5	-7	-13	-18	-24
	-13	-5	-8	-7	-8	-13	-15	-19
24-40°	-7	-5	-10	-9	-11	-14	-16	-20
	-6	-5	-9	-9	-12	-15	-18	-22

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-22	-10	-13	-5	-3	-10	-20	-28
	-19	-8	-9	-6	-4	-9	-14	-18
16°	-16	-4	-9	-5	-7	-12	-17	-23
	-12	-3	-7	-7	-8	-13	-15	-18
24-40°	-5	-4	-10	-8	-11	-13	-15	-18
	-4	-3	-8	-9	-12	-15	-17	-21

SK10298

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-9	-5	-2	0	0	0	0	0



JM AEROFOIL

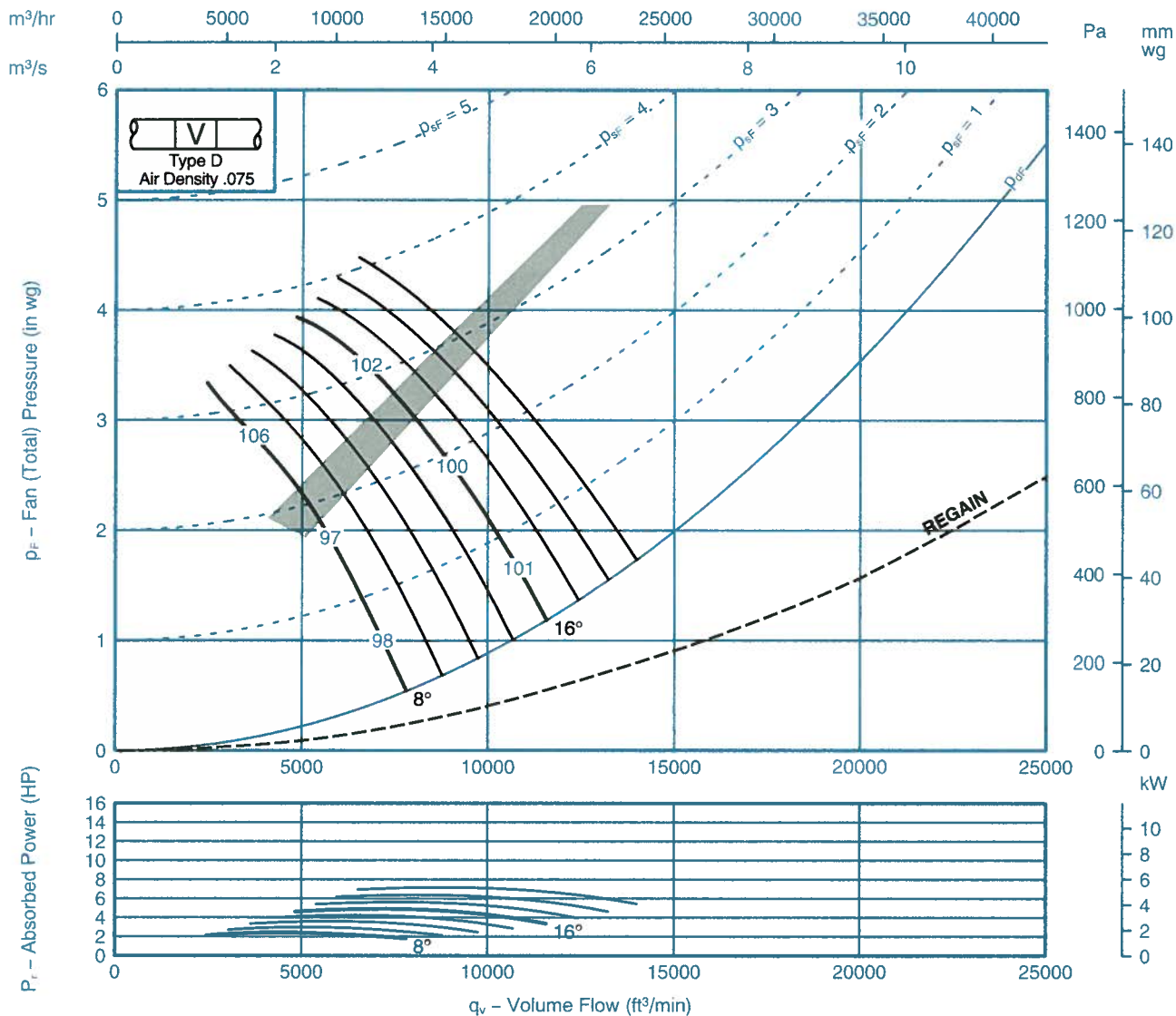
Fan Code: 56JM/20/2/3/...
 560 mm 3500 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-22	-17	-18	-10	-5	-4	-14	-22	
	-14	-6	-13	-7	-8	-7	-12	-14	
16-22°	-13	-8	-10	-5	-7	-11	-17	-19	
	-10	-5	-11	-6	-8	-11	-17	-19	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-20	-15	-17	-10	-4	-3	-12	-19	
	-12	-3	-12	-7	-7	-6	-11	-11	
16-22°	-11	-5	-10	-5	-6	-10	-16	-18	
	-9	-3	-10	-6	-8	-11	-16	-18	

SK10299

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-9	-5	-2	0	0	0	0	0



JM AEROFOIL

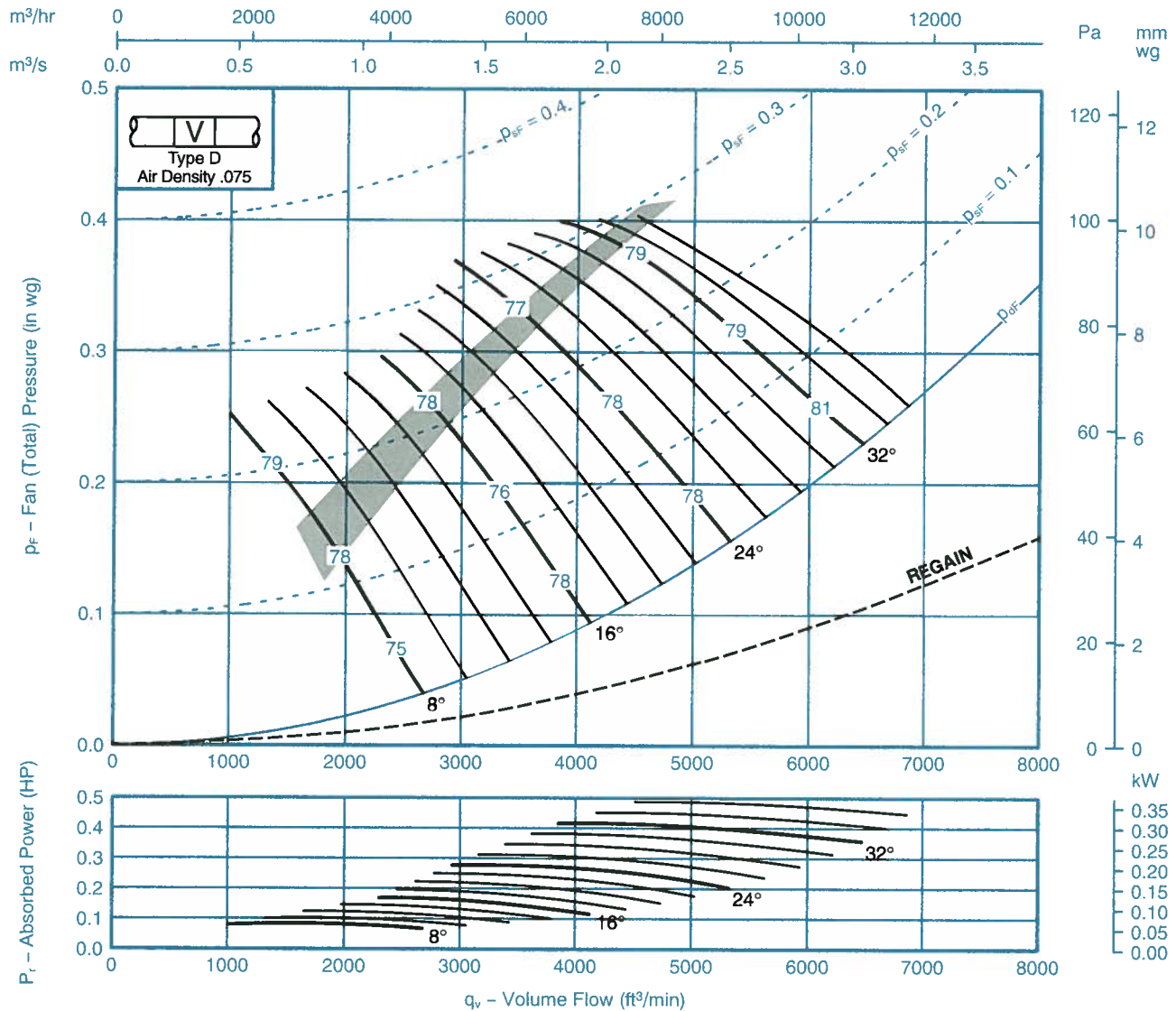
Fan Code: 63JM/20/8/3/...
 630 mm 875 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-8	-7	-4	-8	-13	-20	-26	-34
	Lower	-3	-7	-8	-10	-12	-16	-21	-29
16°	Upper	-7	-5	-5	-10	-14	-21	-27	-33
	Lower	-1	-8	-13	-16	-16	-20	-25	-30
24-36°	Upper	-2	-7	-11	-14	-16	-19	-22	-27
	Lower	-1	-8	-13	-16	-19	-23	-26	-30

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-6	-7	-4	-8	-13	-20	-25	-31
	Lower	-1	-7	-9	-10	-12	-15	-21	-27
16°	Upper	-5	-5	-5	-10	-14	-21	-26	-31
	Lower	0	-8	-13	-16	-16	-20	-24	-28
24-36°	Upper	0	-7	-11	-14	-16	-19	-21	-25
	Lower	0	-8	-13	-16	-19	-22	-24	-27

SK10301

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

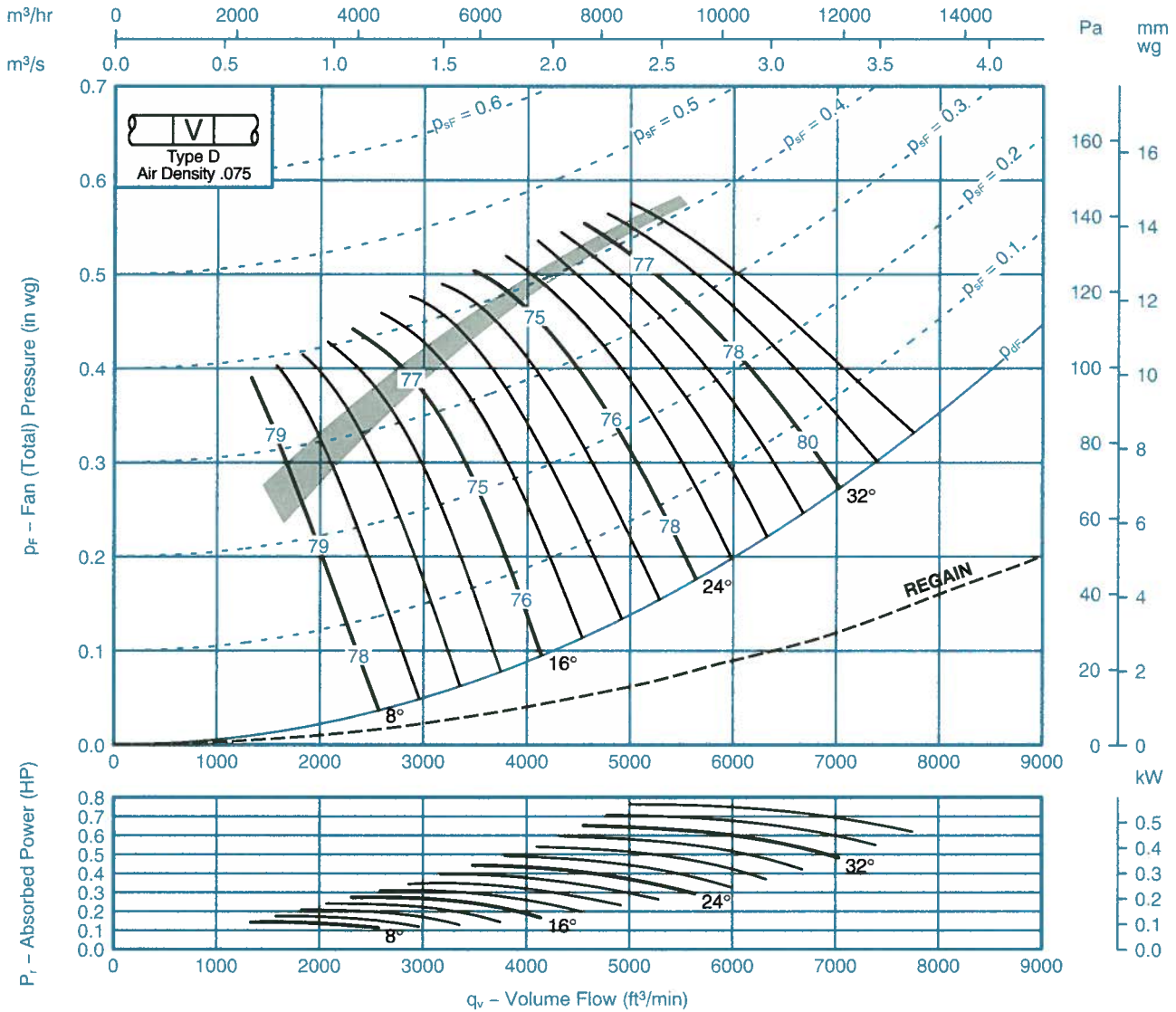
Fan Code: 63JM/20/8/6/...
 630 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-8	-7	-4	-8	-13	-20	-26	-34	
	-10	-8	-5	-6	-10	-17	-23	-32	
16°	-8	-7	-5	-8	-10	-18	-25	-32	
	-4	-7	-7	-10	-11	-15	-20	-27	
24-36°	-4	-7	-7	-12	-14	-18	-22	-26	
	-3	-6	-9	-12	-15	-19	-24	-28	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-6	-7	-4	-8	-13	-20	-25	-32	
	-9	-8	-5	-6	-10	-16	-23	-31	
16°	-7	-7	-5	-8	-10	-18	-24	-30	
	-4	-7	-7	-10	-11	-14	-20	-25	
24-36°	-3	-7	-7	-12	-14	-18	-24	-25	
	-2	-6	-9	-12	-15	-19	-23	-26	

SK10302

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

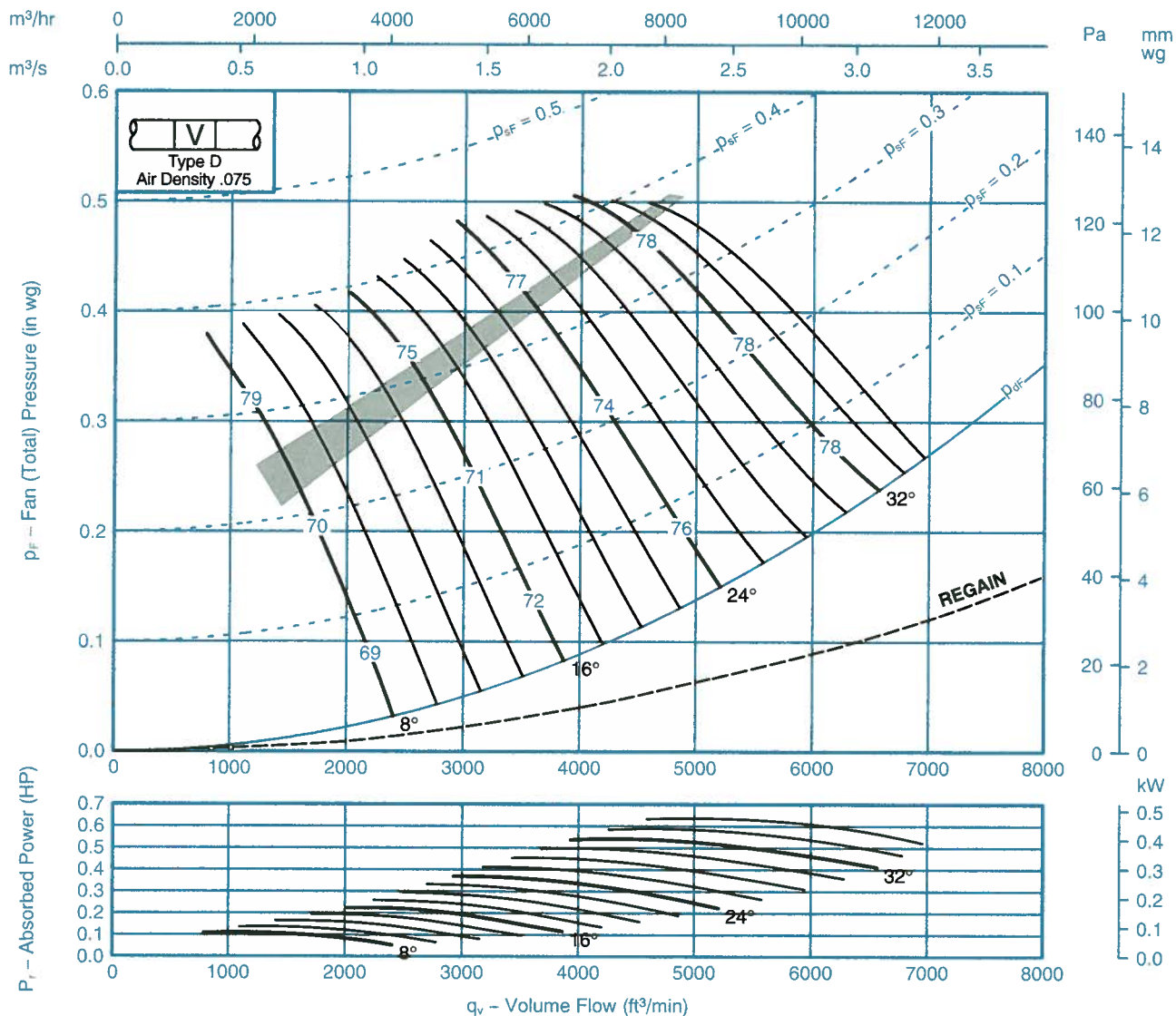
Fan Code: 63JM/25/8/6/...
 630 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-10	-8	-4	-6	-11	-17	-26	-34	
	-5	-7	-8	-10	-11	-10	-19	-25	
16°	-6	-5	-6	-10	-10	-14	-21	-27	
	-4	-6	-9	-12	-13	-14	-22	-28	
24-36°	-5	-5	-7	-11	-13	-17	-21	-24	
	-3	-6	-8	-13	-15	-18	-24	-28	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-8	-7	-4	-6	-11	-17	-26	-32	
	-3	-6	-8	-10	-11	-9	-17	-23	
16°	-5	-5	-6	-10	-10	-14	-21	-26	
	-2	-5	-9	-12	-13	-14	-22	-27	
24-36°	-3	-5	-7	-11	-13	-16	-20	-23	
	0	-5	-8	-13	-15	-18	-23	-27	

SK10303

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

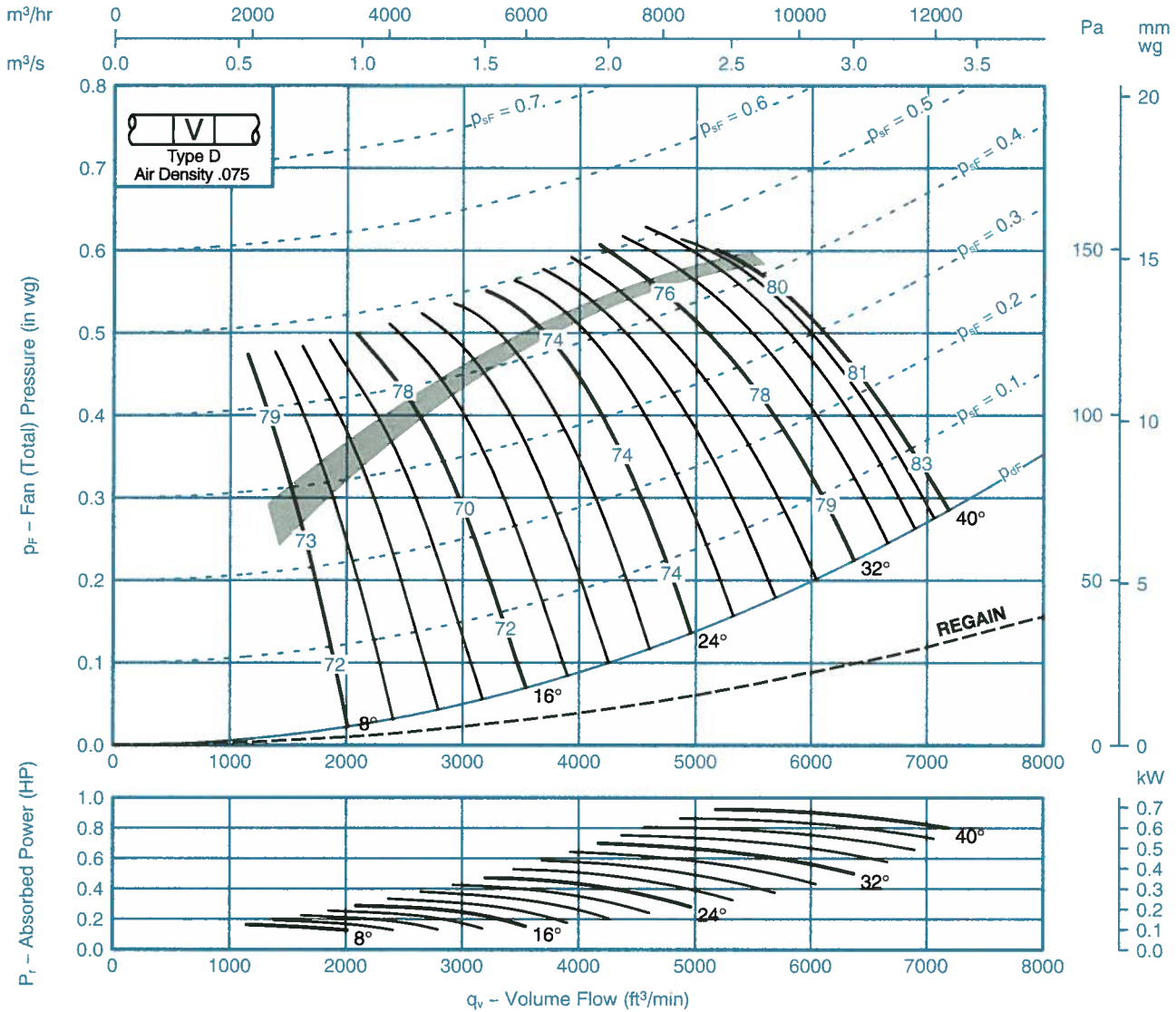
Fan Code: 63JM/25/8/9/...
 630 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-10	-9	-6	-4	-9	-16	-25	-33
	-10	-9	-7	-6	-8	-9	-18	-26
16°	-11	-7	-4	-7	-10	-16	-23	-30
	-8	-4	-8	-10	-10	-11	-20	-26
24-40°	-6	-4	-7	-12	-13	-16	-20	-23
	-5	-5	-7	-13	-14	-17	-23	-28

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-8	-7	-6	-4	-9	-15	-24	-31
	-9	-7	-7	-6	-8	-8	-17	-24
16°	-9	-5	-4	-7	-9	-15	-23	-29
	-7	-2	-7	-10	-10	-11	-20	-26
24-40°	-5	-3	-6	-12	-13	-15	-19	-22
	-3	-3	-7	-13	-14	-17	-22	-27

SK10304

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

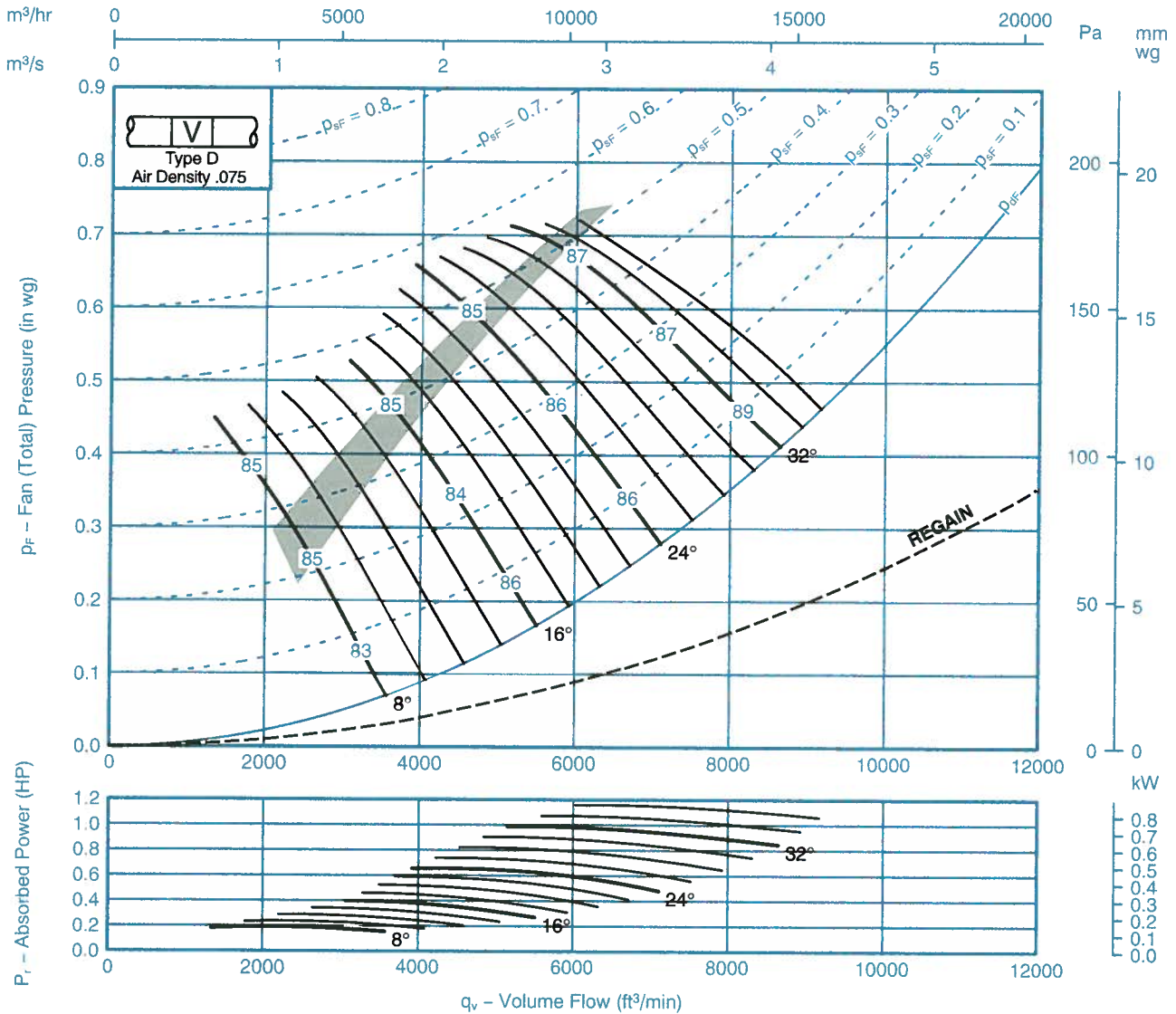
Fan Code: 63JM/20/6/3/...
 630 mm 1170 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°		-7	-10	-5	-6	-12	-17	-24	-31
		-2	-11	-8	-10	-13	-15	-20	-27
16°		-6	-10	-4	-8	-14	-16	-25	-31
		-1	-11	-11	-17	-19	-19	-24	-30
24-36°		-2	-9	-9	-14	-16	-19	-22	-26
		-1	-10	-11	-17	-20	-22	-26	-29

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°		-5	-10	-5	-5	-12	-17	-23	-28
		-1	-11	-8	-10	-13	-14	-19	-25
16°		-4	-10	-4	-8	-14	-16	-24	-28
		0	-11	-11	-17	-19	-19	-23	-28
24-36°		-1	-9	-9	-14	-16	-19	-20	-24
		0	-10	-11	-16	-20	-22	-24	-27

SK10305

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

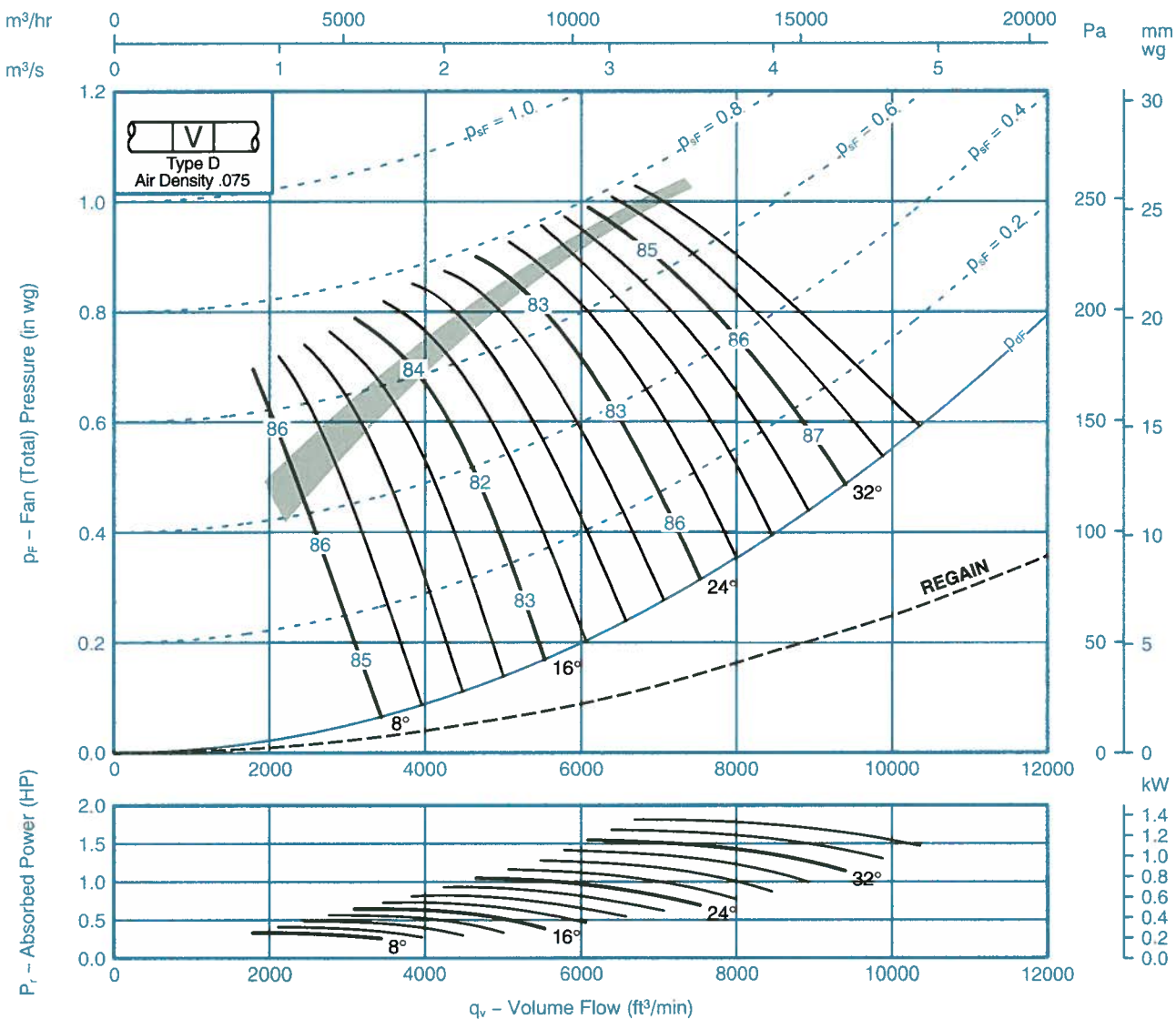
Fan Code: 63JM/20/6/6/...
 630 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

		Inlet Levels							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-9	-8	-5	-6	-12	-17	-23	-31	
	-13	-9	-6	-4	-8	-14	-20	-29	
16°	-12	-7	-5	-6	-9	-14	-22	-29	
	-9	-4	-7	-9	-11	-13	-18	-25	
24-40°	-7	-4	-7	-10	-14	-16	-20	-24	
	-5	-4	-8	-12	-15	-18	-23	-27	

		Outlet Levels							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-8	-6	-4	-6	-12	-17	-23	-29	
	-13	-8	-6	-4	-8	-12	-20	-27	
16°	-11	-7	-5	-6	-9	-14	-21	-27	
	-8	-4	-7	-9	-11	-13	-17	-23	
24-40°	-6	-4	-7	-10	-14	-16	-20	-23	
	-4	-3	-8	-12	-15	-18	-22	-25	

SK10306

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

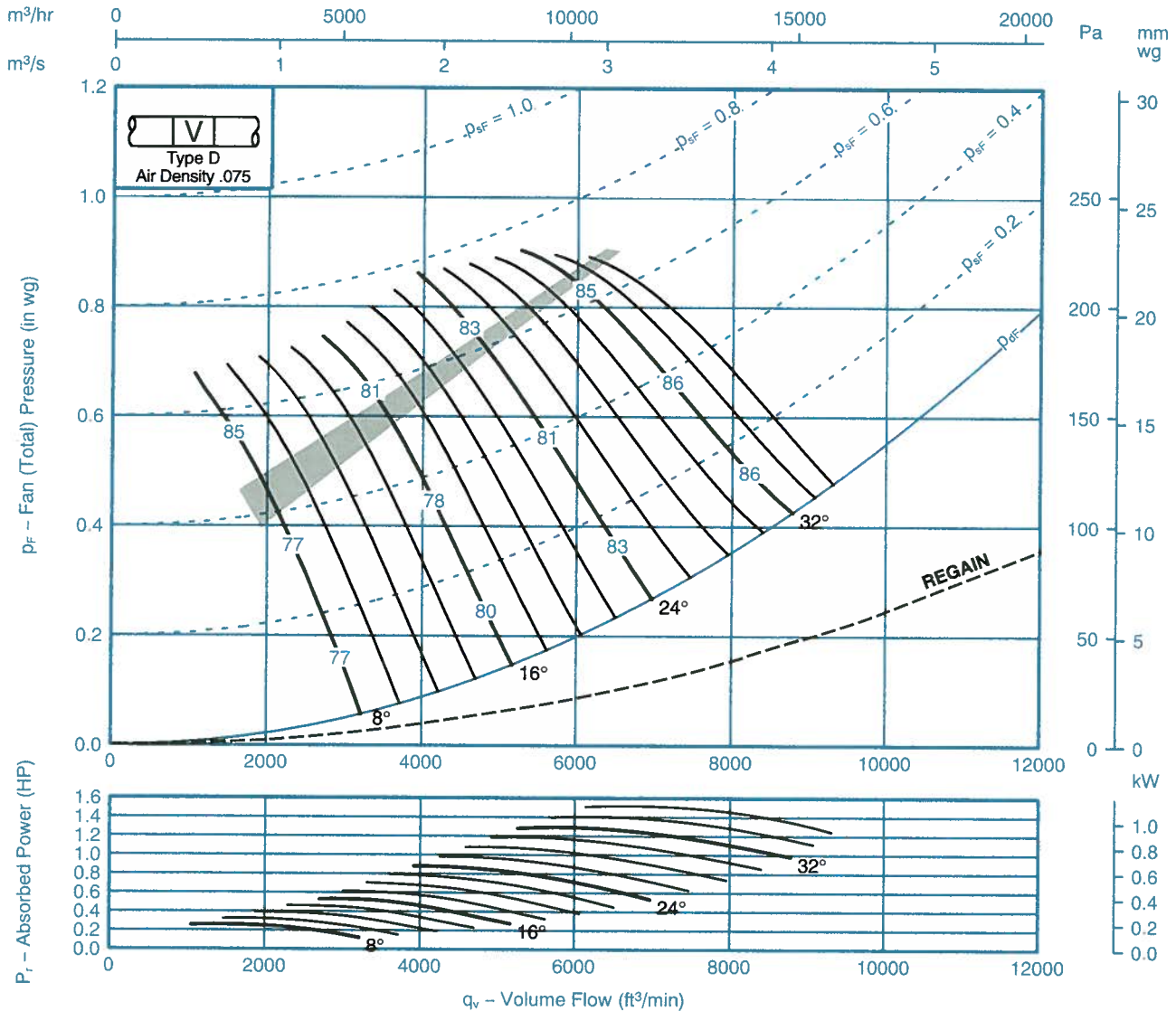
Fan Code: 63JM/25/6/6/...
630 mm 1170 RPM
6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-10	-9	-6	-5	-8	-15	-22	-30
	Lower	-5	-7	-8	-10	-10	-10	-15	-23
16°	Upper	-6	-6	-6	-11	-10	-13	-19	-24
	Lower	-4	-5	-9	-13	-13	-14	-19	-26
24-36°	Upper	-5	-5	-7	-11	-13	-16	-21	-23
	Lower	-3	-5	-9	-13	-15	-18	-23	-27

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-8	-7	-6	-5	-8	-15	-22	-28
	Lower	-4	-5	-8	-10	-10	-9	-14	-21
16°	Upper	-5	-5	-6	-11	-9	-12	-19	-24
	Lower	-2	-4	-8	-13	-13	-14	-19	-25
24-36°	Upper	-3	-4	-7	-10	-12	-15	-20	-22
	Lower	-1	-3	-8	-13	-15	-18	-22	-26

SK10307

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

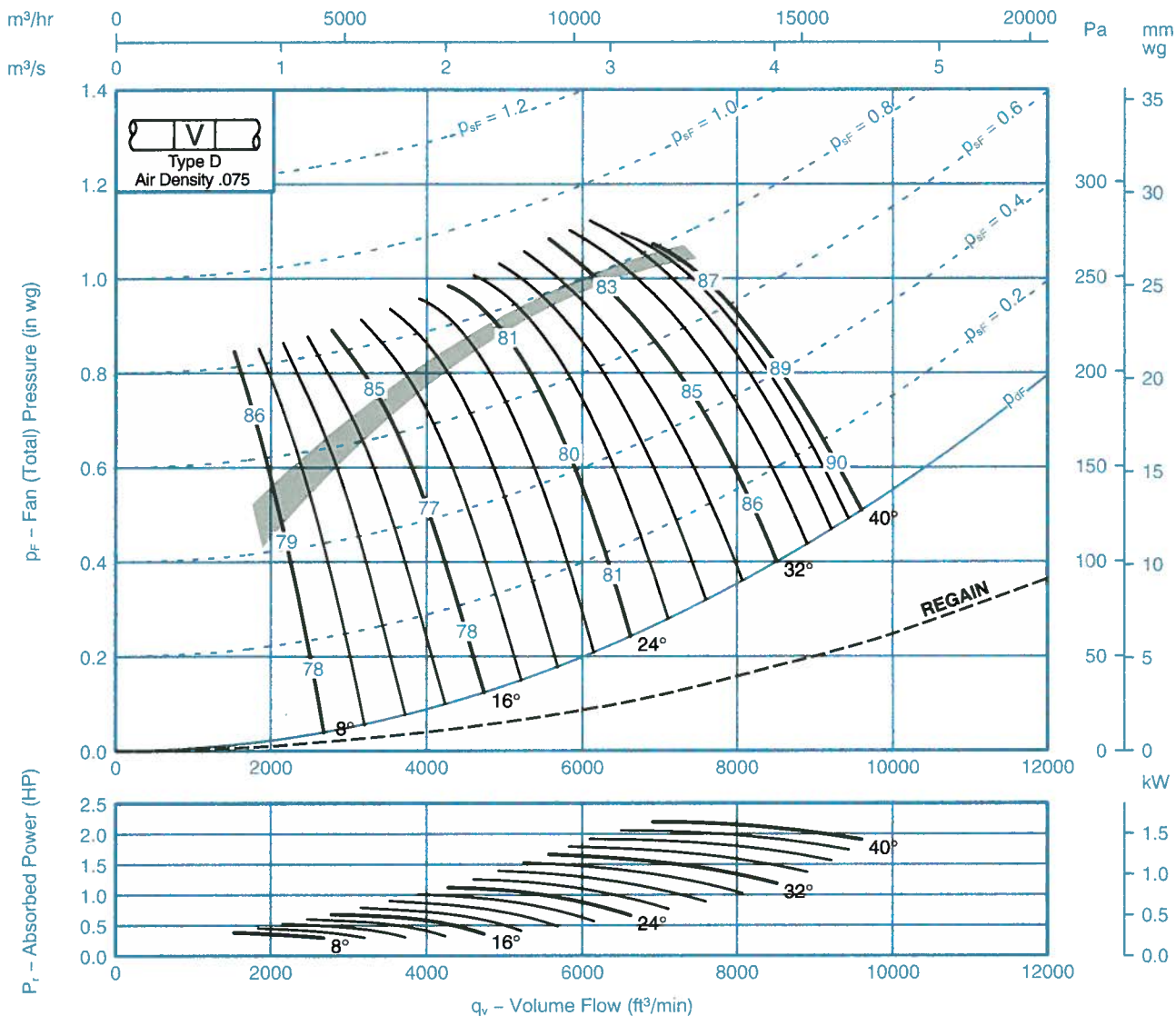
Fan Code: 63JM/25/6/9/...
 630 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-11	-8	-9	-4	-6	-13	-21	-29
	Lower	-11	-9	-8	-7	-7	-8	-14	-23
16°	Upper	-11	-7	-8	-5	-8	-13	-20	-27
	Lower	-8	-5	-7	-9	-10	-11	-16	-24
24-40°	Upper	-6	-5	-7	-11	-13	-15	-20	-22
	Lower	-4	-6	-7	-12	-14	-17	-22	-27

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-9	-7	-8	-4	-6	-13	-21	-28
	Lower	-10	-7	-7	-7	-7	-7	-13	-21
16°	Upper	-10	-5	-8	-5	-8	-13	-20	-26
	Lower	-7	-3	-6	-9	-10	-11	-15	-23
24-40°	Upper	-5	-3	-6	-10	-13	-14	-18	-20
	Lower	-2	-3	-6	-12	-14	-17	-21	-26

SK10308

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

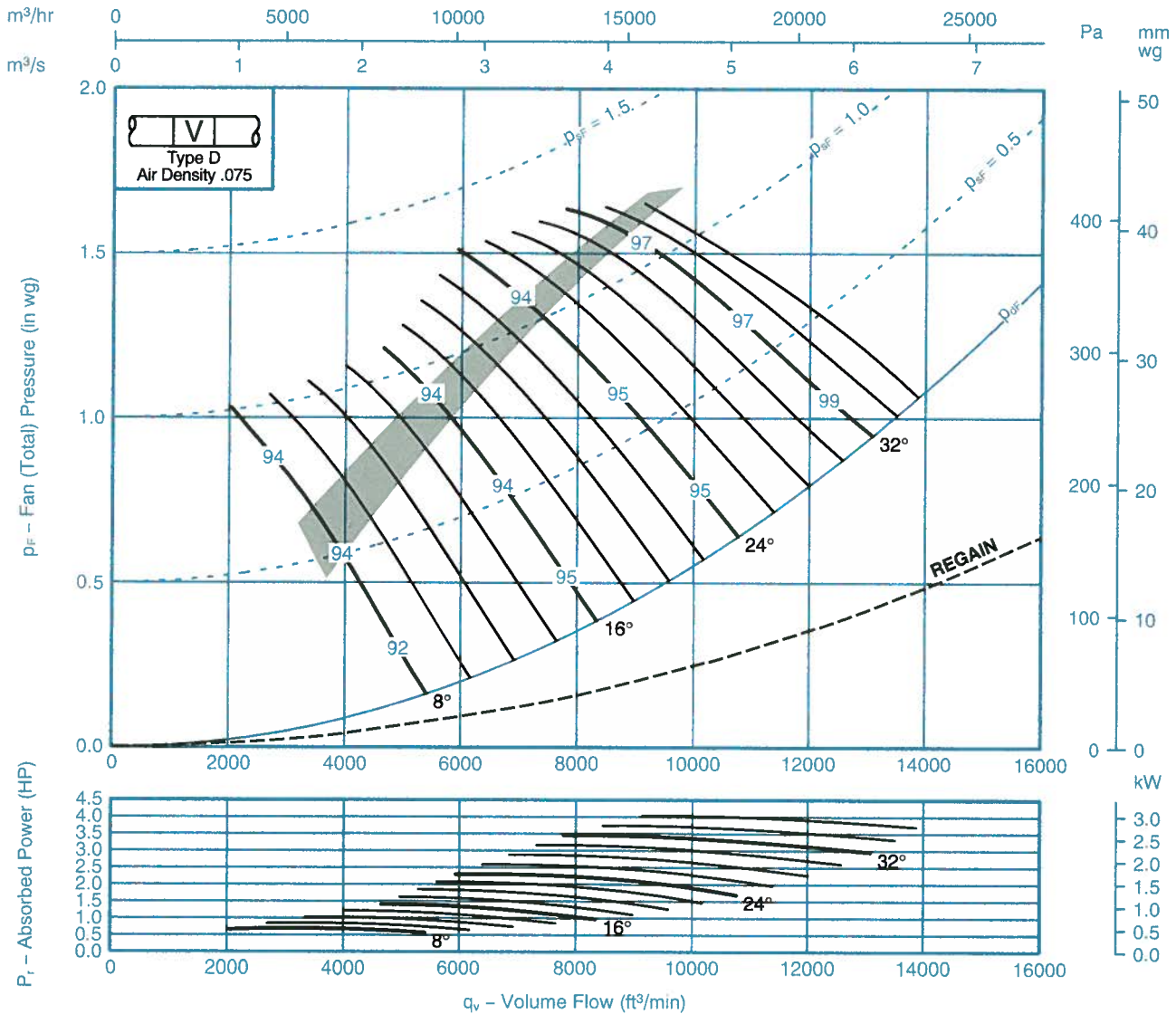
Fan Code: 63JM/20/4/3/...
 630 mm 1770 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Pitch Angle	Inlet Levels							
	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-8	-13	-8	-5	-8	-14	-21	-27
	-3	-12	-9	-10	-11	-13	-17	-23
16°	-6	-13	-6	-6	-11	-15	-21	-28
	-1	-10	-10	-15	-19	-18	-22	-27
24-36°	-2	-9	-9	-13	-16	-17	-21	-24
	-2	-9	-10	-15	-19	-21	-25	-28

Pitch Angle	Outlet Levels							
	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-5	-12	-7	-4	-8	-13	-20	-24
	-2	-12	-9	-10	-11	-12	-17	-21
16°	-5	-12	-6	-5	-11	-14	-20	-25
	-1	-10	-10	-15	-19	-18	-21	-25
24-36°	-1	-8	-9	-13	-16	-17	-20	-22
	0	-8	-10	-15	-19	-20	-23	-25

SK10309

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

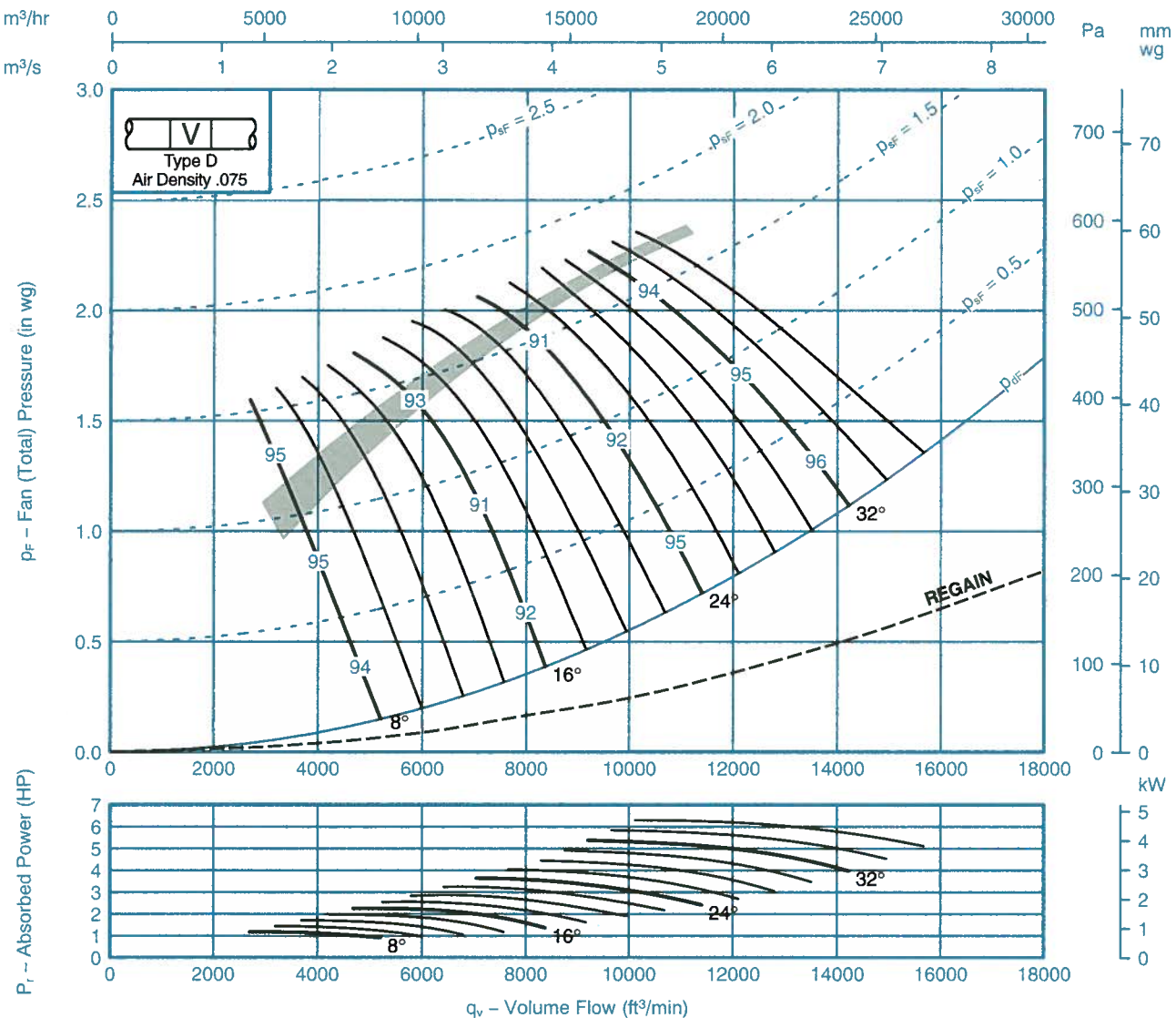
Fan Code: 63JM/20/4/6/...
 630 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-8	-8	-4	-9	-13	-20	-27
	-15	-11	-9	-5	-6	-10	-17	-24
16°	-14	-8	-7	-5	-8	-10	-18	-25
	-11	-5	-7	-7	-10	-11	-15	-21
24-36°	-8	-4	-8	-7	-12	-14	-18	-22
	-6	-4	-8	-10	-14	-16	-21	-25

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-11	-7	-7	-4	-9	-13	-19	-24
	-15	-10	-9	-5	-6	-8	-16	-22
16°	-13	-8	-7	-5	-8	-10	-17	-23
	-11	-5	-7	-7	-10	-11	-14	-19
24-36°	-7	-4	-8	-7	-12	-14	-18	-21
	-6	-4	-7	-10	-14	-16	-20	-23

SK10310

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

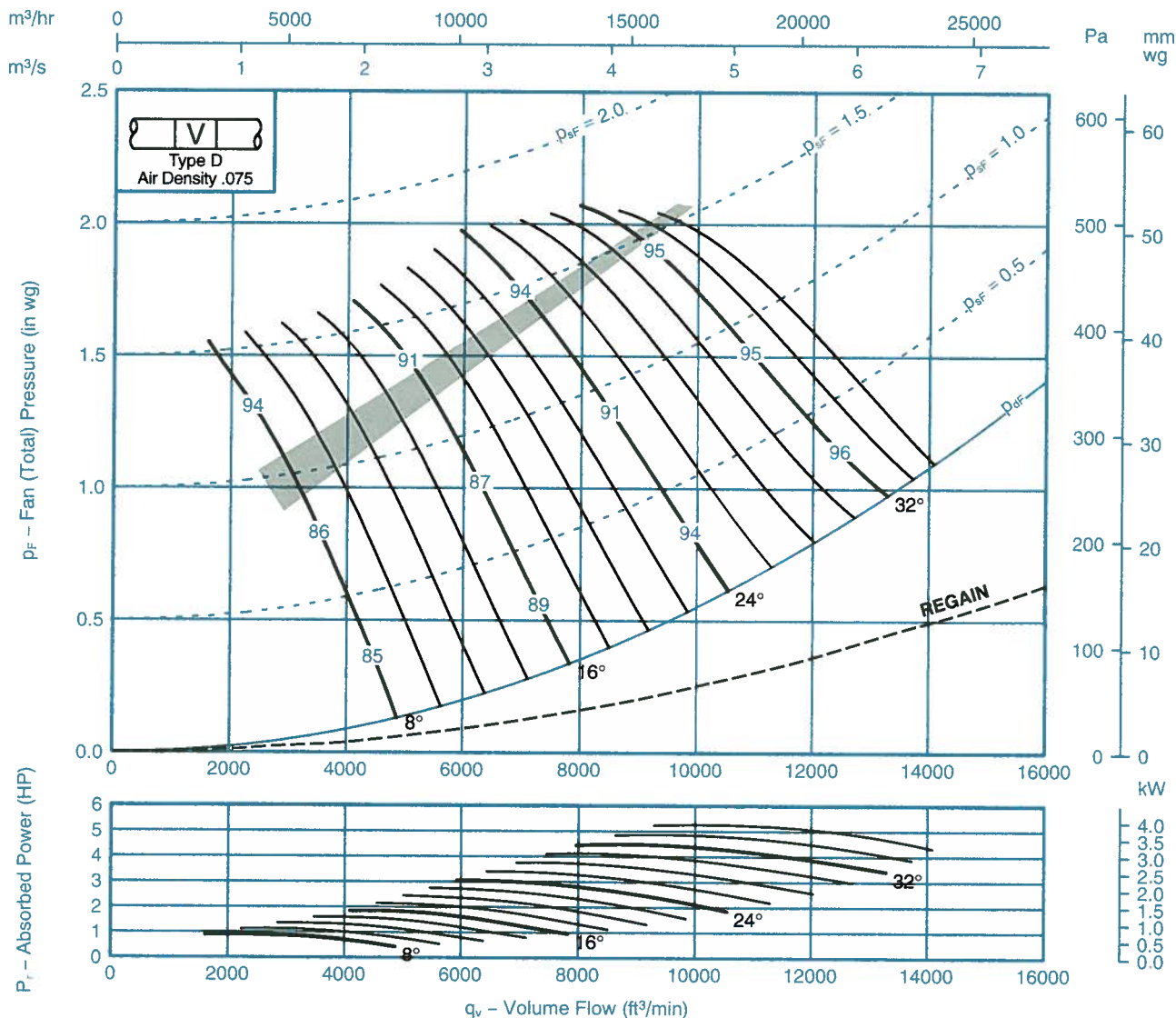
Fan Code: 63JM/25/4/6/...
 630 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-14	-11	-9	-5	-6	-11	-18	-26
	Lower	-9	-6	-8	-9	-10	-11	-10	-19
16°	Upper	-8	-7	-6	-7	-11	-11	-15	-22
	Lower	-7	-5	-7	-10	-13	-14	-15	-23
24-36°	Upper	-5	-7	-7	-8	-13	-15	-19	-23
	Lower	-4	-5	-9	-10	-15	-17	-20	-26

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-11	-9	-7	-5	-6	-10	-10	-17
	Lower	-8	-5	-7	-9	-10	-10	-9	-17
16°	Upper	-7	-6	-6	-7	-11	-10	-15	-21
	Lower	-5	-4	-6	-10	-13	-14	-14	-22
24-36°	Upper	-3	-5	-6	-8	-13	-14	-18	-21
	Lower	-2	-3	-7	-10	-15	-17	-19	-25

SK10311

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

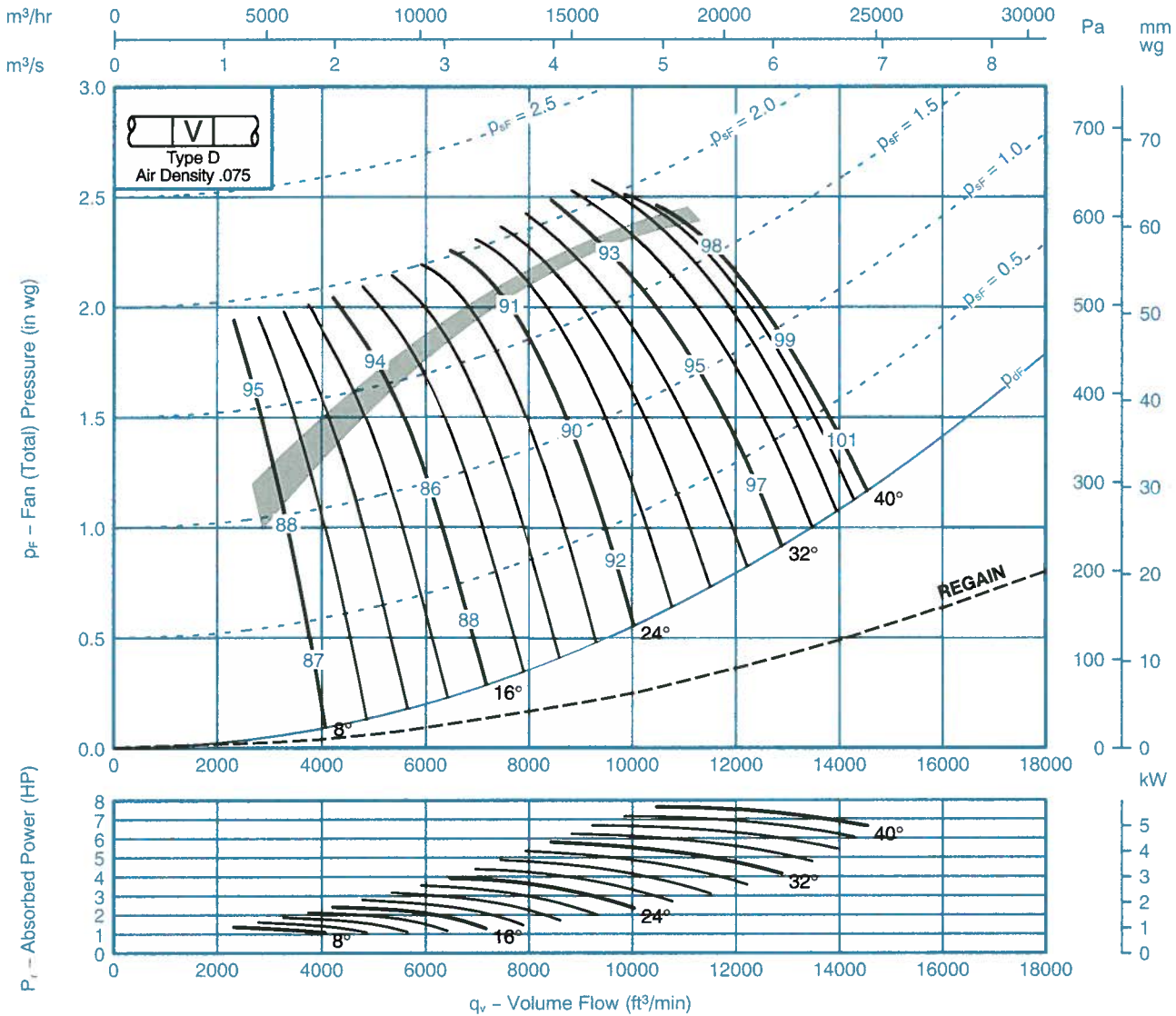
Fan Code: 63JM/25/4/9/...
630 mm 1770 RPM
9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	63	125	250	500	1k	2k	4k	8k	
8°	-14	-11	-9	-6	-5	-9	-16	-25	
	-13	-10	-9	-7	-7	-8	-9	-19	
16°	-12	-11	-7	-5	-7	-10	-16	-23	
	-8	-9	-5	-8	-11	-11	-11	-21	
24-40°	-6	-8	-6	-8	-13	-14	-18	-22	
	-4	-7	-7	-9	-15	-16	-20	-26	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	63	125	250	500	1k	2k	4k	8k	
8°	-12	-10	-7	-6	-4	-8	-15	-23	
	-12	-10	-7	-7	-6	-7	-8	-17	
16°	-11	-11	-6	-5	-7	-9	-15	-22	
	-7	-9	-3	-8	-11	-11	-11	-20	
24-40°	-4	-7	-4	-7	-13	-13	-16	-20	
	-2	-7	-5	-9	-15	-16	-19	-25	

SK10312

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

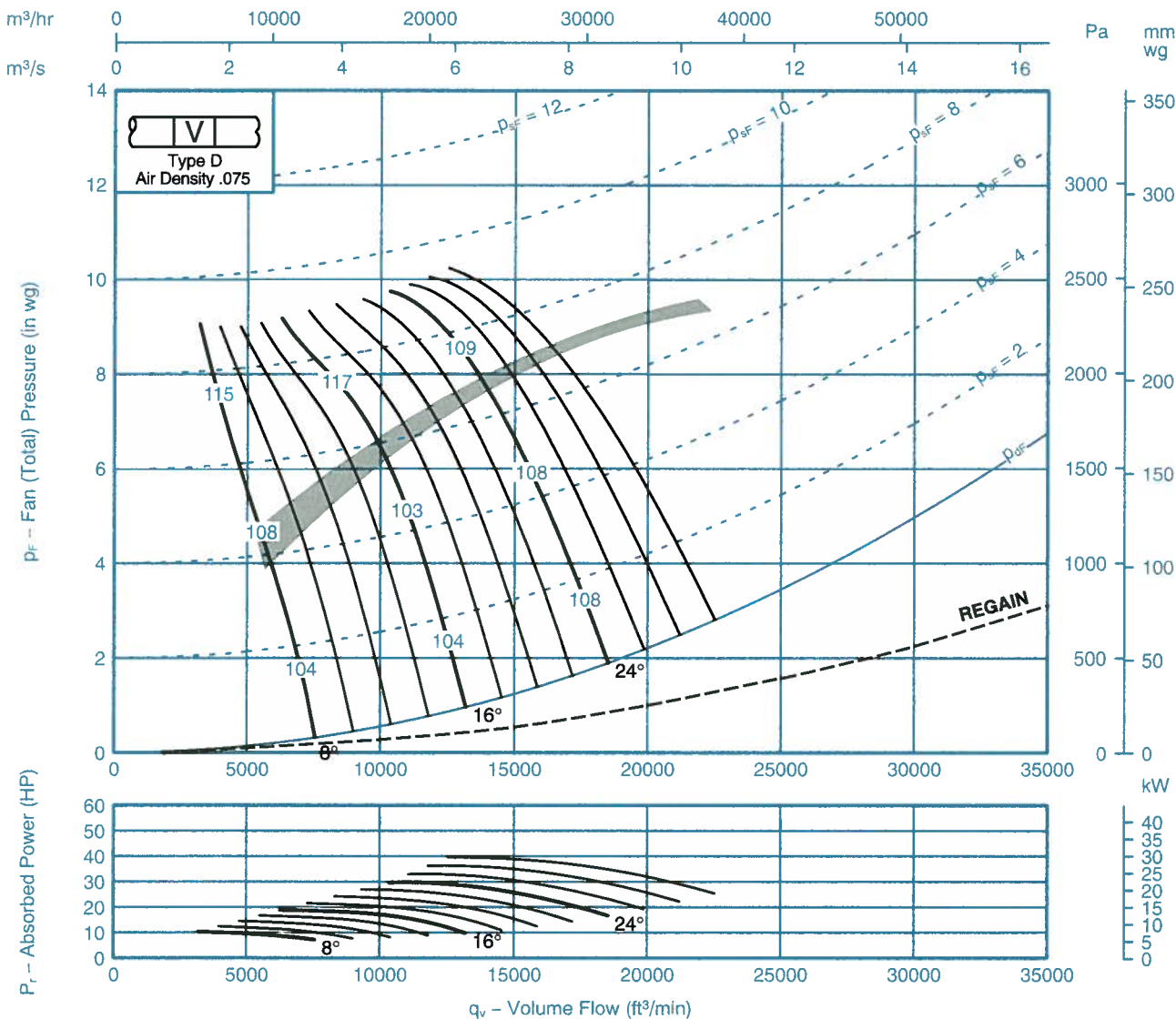
Fan Code: 63JM/31/2/9/...
630 mm 3500 RPM
9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-14	-11	-9	-7	-5	-9	-16
	-15	-13	-10	-9	-8	-7	-8	-9
16°	-14	-12	-11	-7	-5	-7	-10	-16
	-10	-9	-9	-6	-9	-11	-12	-12
24-30°	-8	-6	-9	-6	-9	-14	-15	-18
	-7	-5	-8	-8	-10	-16	-17	-21

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-14	-13	-10	-7	-6	-4	-9	-15
	-14	-13	-10	-7	-7	-6	-7	-7
16°	-13	-12	-11	-6	-5	-7	-10	-15
	-9	-9	-9	-4	-8	-11	-11	-11
24-30°	-7	-6	-9	-5	-8	-13	-14	-17
	-4	-5	-8	-6	-10	-16	-16	-20

SK10631

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-8	-4	-1	0	0	0	0	0



JM AEROFOIL

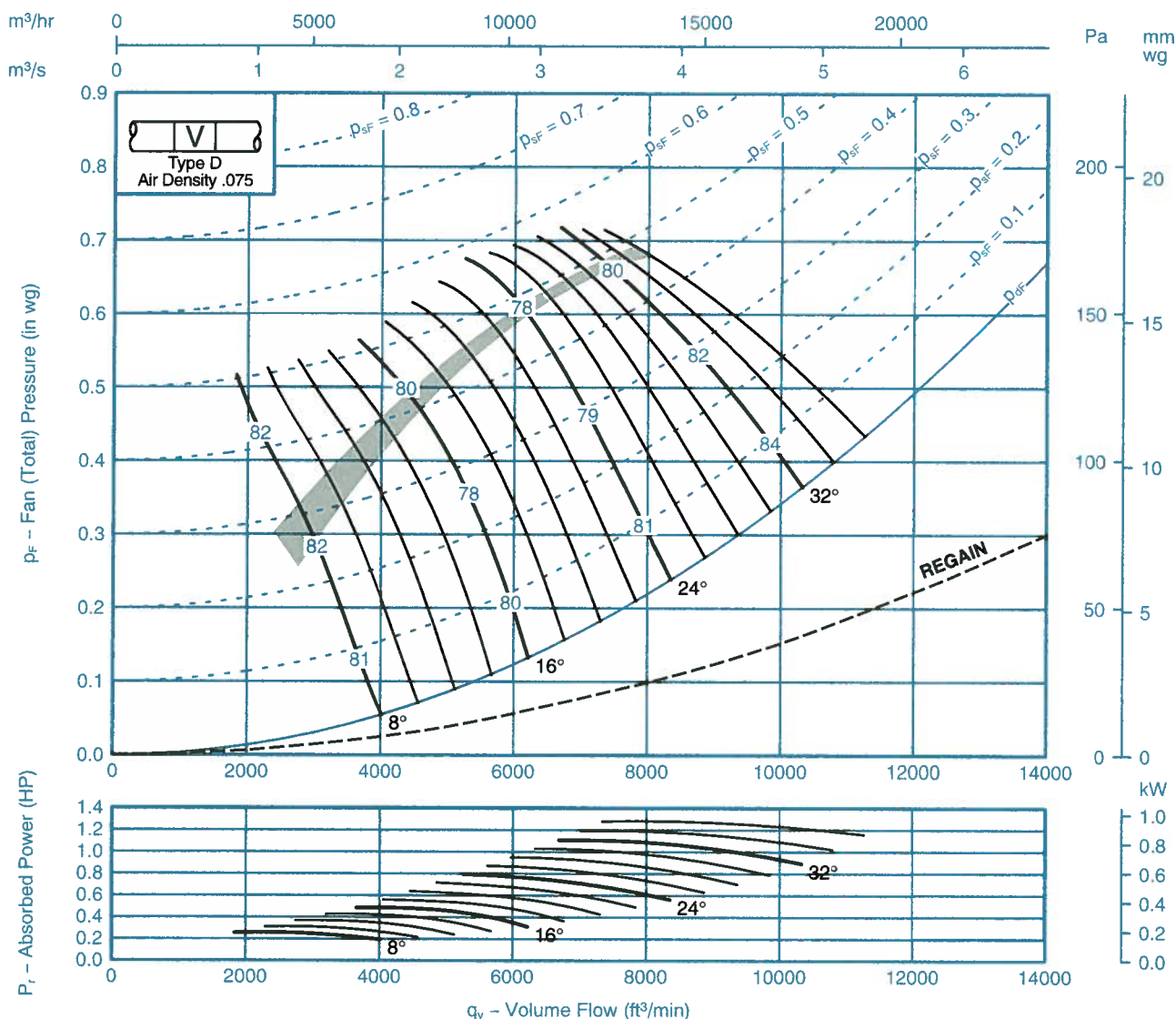
Fan Code: 71JM/20/8/6/...
 710 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-10	-7	-4	-7	-11	-19	-25	-33
	-12	-9	-5	-5	-8	-16	-22	-30
16°	-11	-6	-4	-8	-11	-18	-24	-32
	-6	-6	-7	-9	-10	-14	-19	-25
24-36°	-5	-7	-6	-10	-11	-15	-19	-24
	-4	-6	-8	-11	-13	-17	-21	-26

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-8	-7	-4	-8	-11	-19	-24	-31
	-11	-9	-5	-5	-8	-15	-22	-29
16°	-10	-6	-4	-8	-11	-18	-23	-30
	-5	-6	-7	-9	-10	-14	-18	-23
24-36°	-5	-6	-6	-10	-11	-15	-18	-22
	-3	-6	-8	-11	-13	-17	-20	-24

SK10313

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-7	-3	-1	0	0	0	0	0



JM AEROFOIL

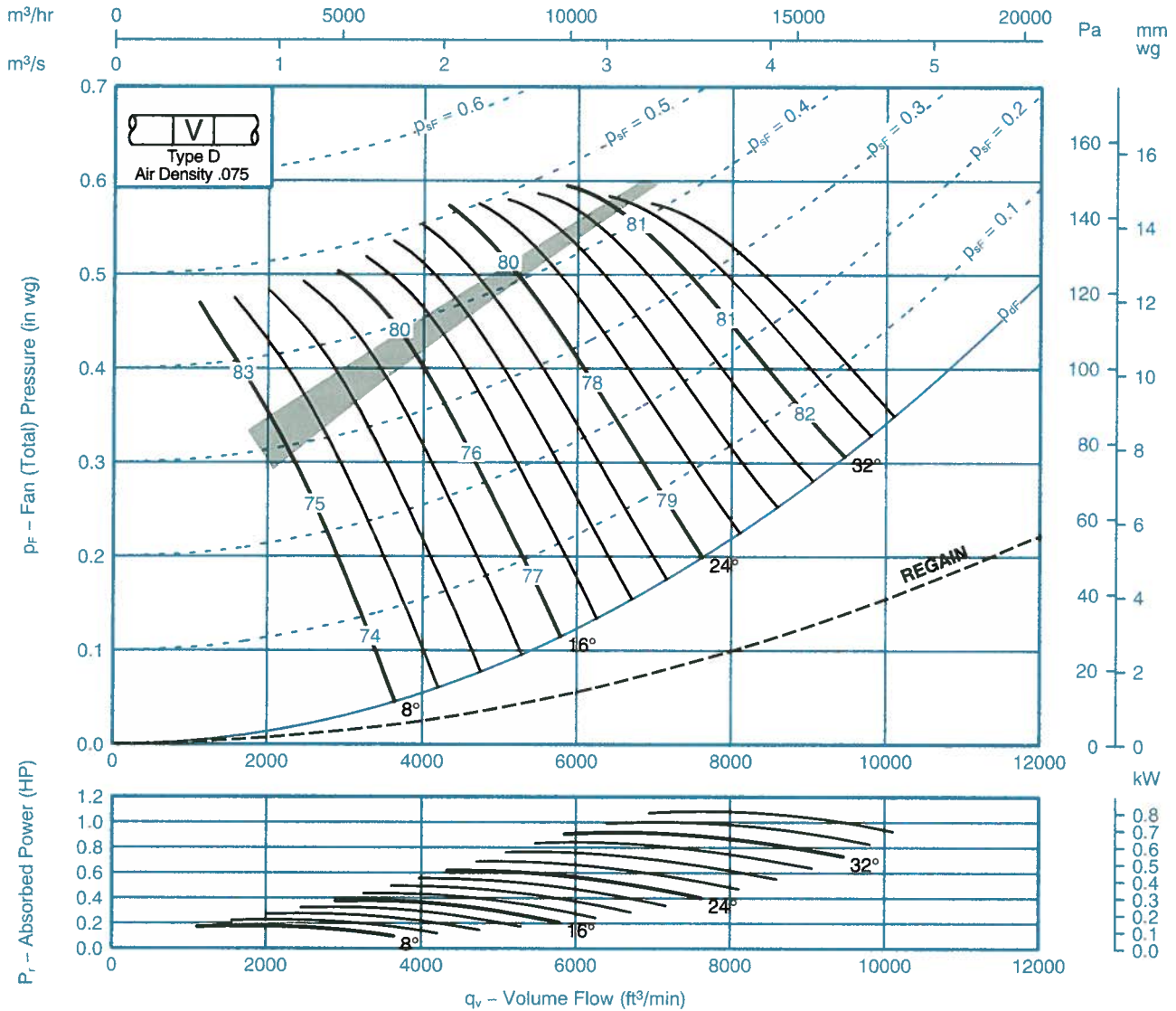
Fan Code: 71JM/25/8/6/...
 710 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Pitch Angle	Inlet Levels							
	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-10	-5	-4	-11	-17	-25	-33
	-7	-9	-7	-7	-8	-10	-17	-24
16°	-8	-6	-7	-7	-10	-14	-21	-27
	-5	-5	-9	-11	-13	-14	-20	-26
24-36°	-5	-6	-7	-9	-12	-16	-19	-23
	-4	-6	-8	-10	-13	-16	-21	-25

Pitch Angle	Outlet Levels							
	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-10	-8	-5	-4	-11	-17	-24	-31
	-5	-8	-7	-7	-8	-9	-16	-22
16°	-6	-5	-7	-7	-9	-14	-20	-26
	-3	-4	-9	-11	-13	-14	-20	-25
24-36°	-4	-5	-7	-9	-11	-15	-18	-21
	-1	-5	-7	-10	-13	-16	-20	-24

SK10314

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-7	-3	-1	0	0	0	0	0



JM AEROFOIL

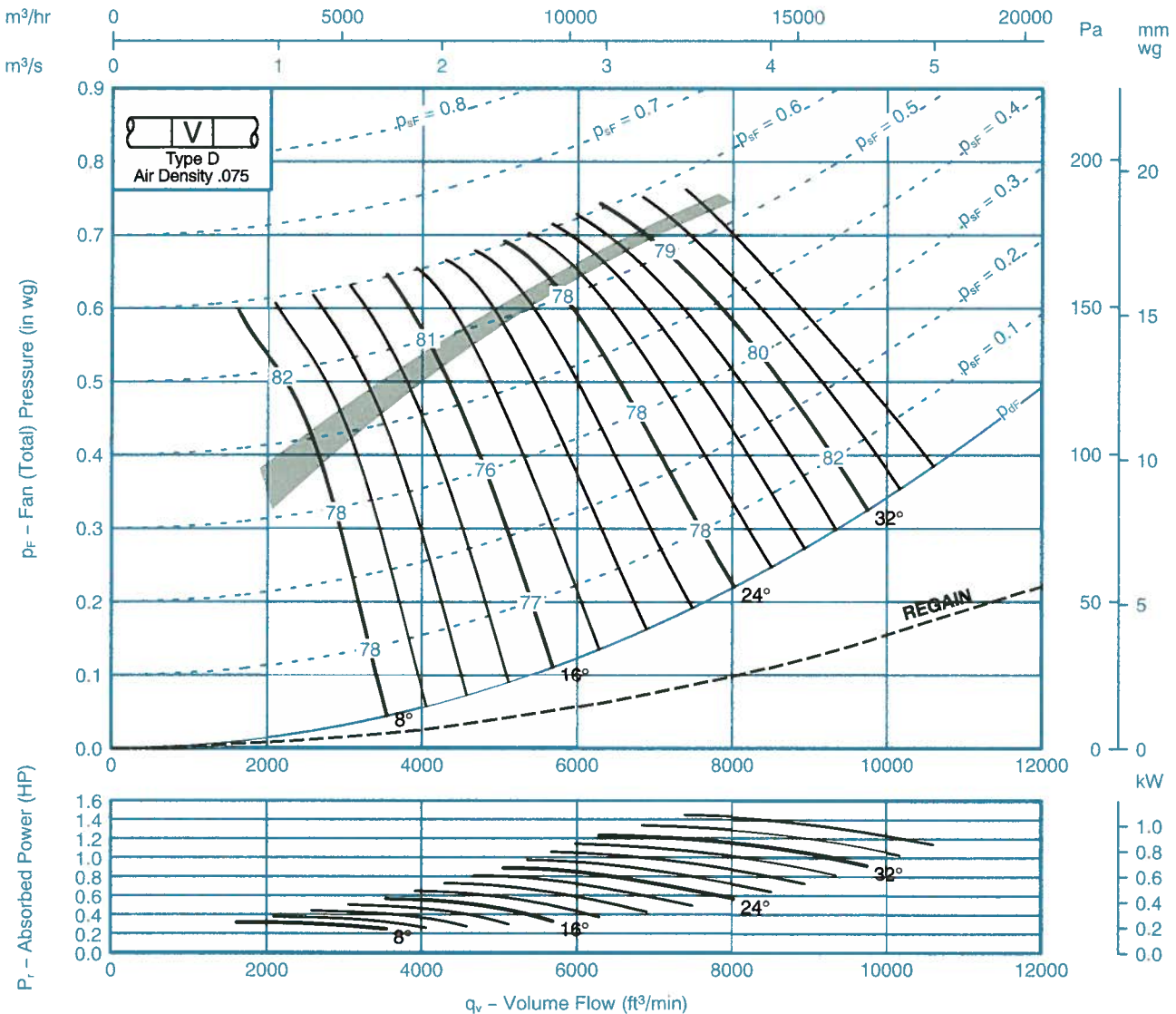
Fan Code: 71JM/25/8/9/...
 710 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-10	-9	-6	-4	-9	-16	-25	-33	
	-10	-9	-7	-6	-8	-9	-18	-25	
16°	-10	-8	-5	-6	-10	-16	-22	-29	
	-9	-5	-6	-9	-10	-12	-19	-25	
24-36°	-8	-6	-6	-8	-11	-14	-18	-22	
	-7	-5	-6	-9	-12	-15	-20	-25	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-8	-7	-6	-4	-9	-15	-24	-31	
	-9	-7	-7	-6	-8	-8	-17	-24	
16°	-9	-6	-4	-6	-10	-15	-22	-28	
	-7	-3	-6	-9	-10	-12	-19	-25	
24-36°	-6	-4	-6	-8	-10	-13	-16	-20	
	-4	-3	-6	-9	-12	-15	-19	-24	

SK10315

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-7	-3	-1	0	0	0	0	0



JM AEROFOIL

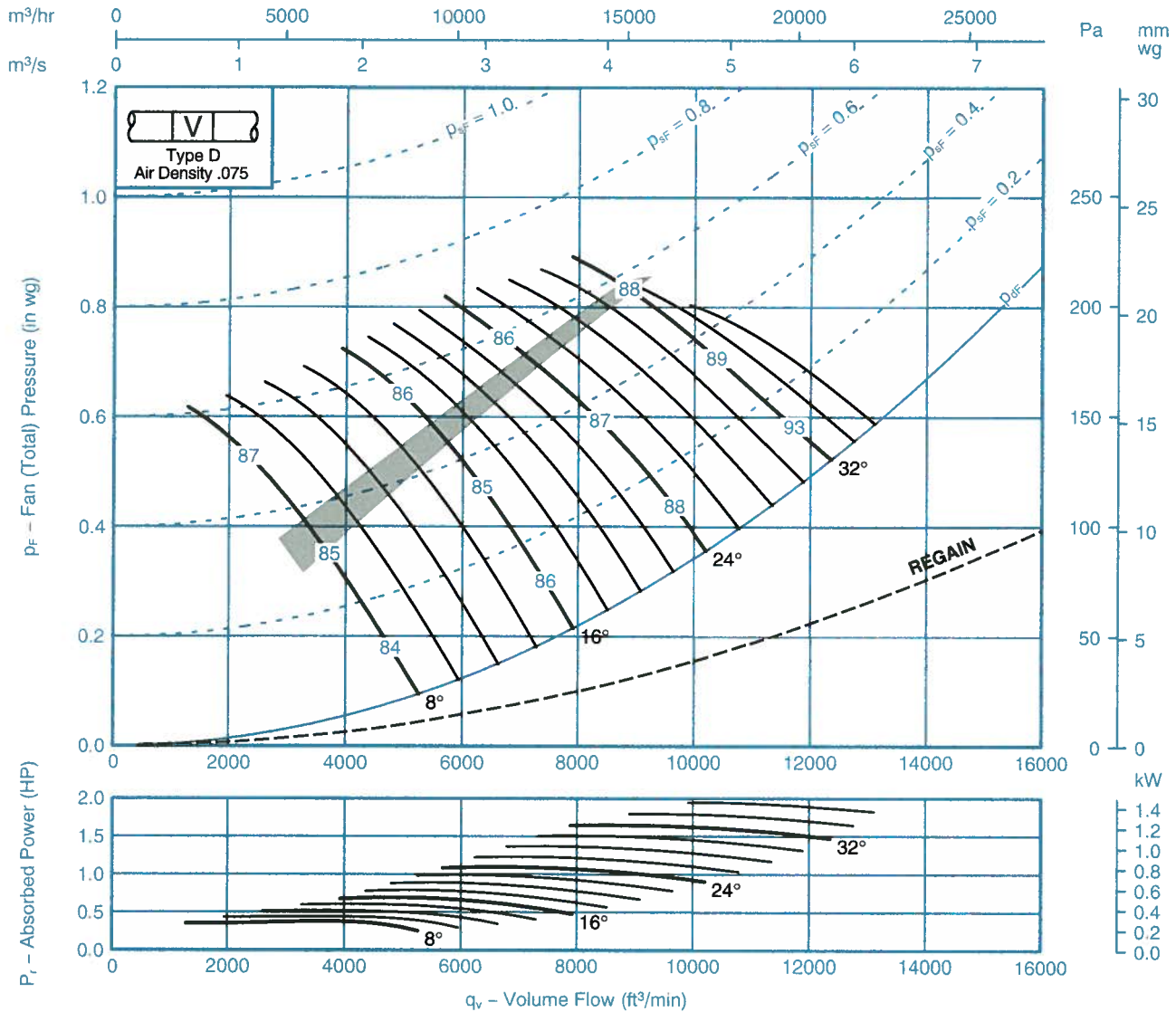
Fan Code: 71JM/20/6/3/...
 710 mm 1170 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-11	-10	-4	-5	-10	-16	-22	-29	
	-5	-10	-7	-7	-10	-13	-18	-25	
16°	-6	-9	-5	-7	-12	-14	-20	-25	
	-2	-9	-9	-14	-15	-16	-20	-25	
24-36°	-3	-8	-9	-11	-11	-14	-17	-22	
	-2	-8	-10	-14	-15	-18	-21	-26	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-8	-10	-4	-5	-10	-15	-21	-26	
	-3	-10	-7	-7	-10	-12	-17	-23	
16°	-4	-9	-5	-7	-12	-14	-18	-23	
	-1	-9	-9	-14	-15	-16	-19	-23	
24-36°	-2	-8	-9	-11	-11	-14	-16	-21	
	-1	-8	-10	-14	-15	-17	-19	-23	

SK10693

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-7	-3	-1	0	0	0	0	0



JM AEROFOIL

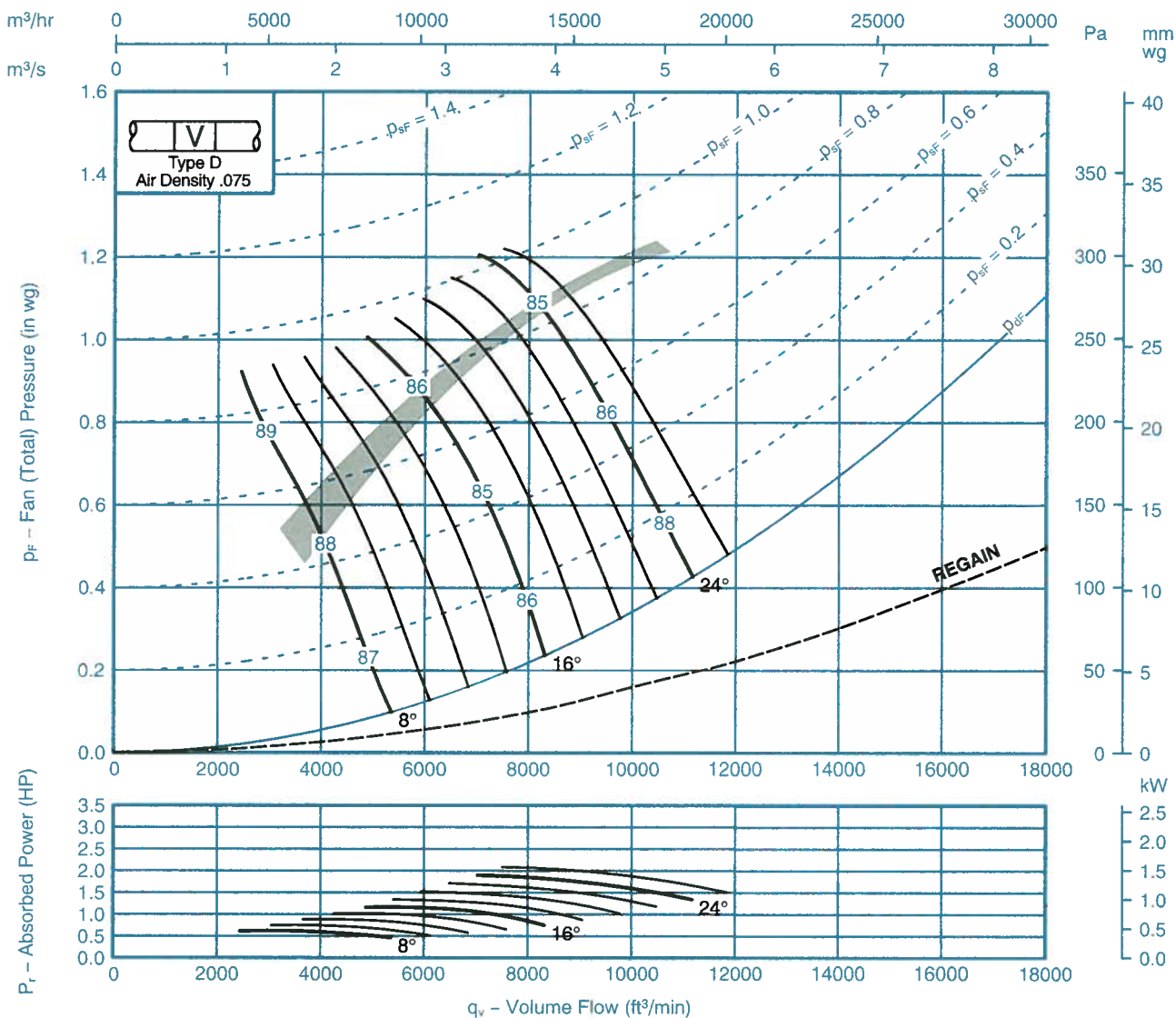
Fan Code: 71JM/20/6/6/...
 710 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-9	-4	-5	-10	-16	-22	-29
	-15	-10	-7	-4	-7	-13	-19	-27
16°	-14	-8	-4	-6	-10	-15	-22	-28
	-9	-5	-7	-8	-10	-12	-17	-23
24-26°	-8	-5	-7	-9	-11	-14	-17	-22
	-6	-4	-8	-11	-13	-16	-19	-24

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-7	-4	-5	-10	-16	-24	-27
	-15	-9	-7	-4	-7	-12	-19	-25
16°	-13	-8	-4	-6	-10	-15	-21	-27
	-9	-5	-7	-8	-10	-12	-16	-21
24-26°	-7	-5	-7	-9	-11	-14	-16	-21
	-5	-4	-8	-11	-13	-16	-18	-23

SK10316

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-7	-3	-1	0	0	0	0	0



JM AEROFOIL

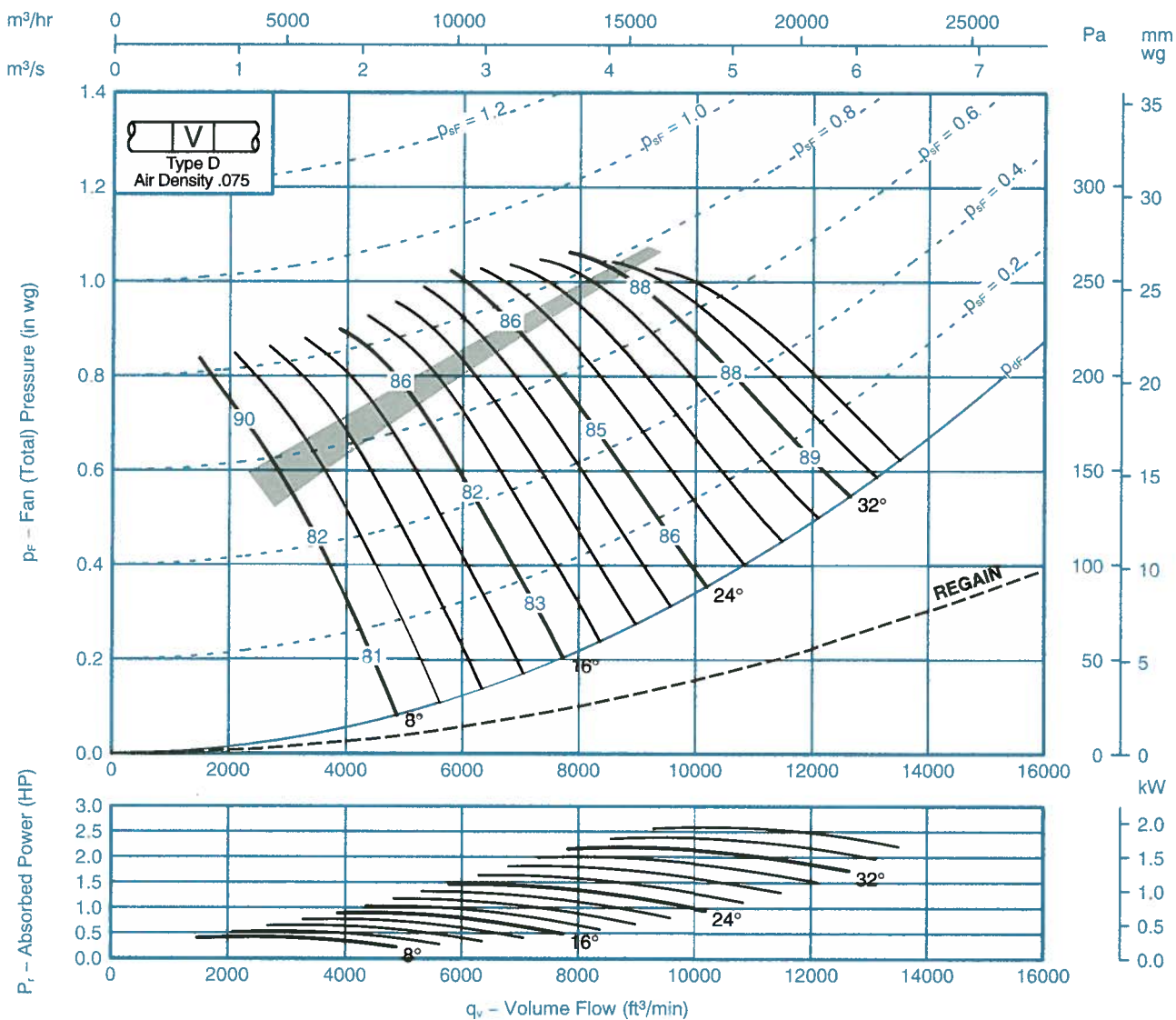
Fan Code: 71JM/25/6/6/...
 710 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-12	-11	-6	-4	-7	-15	-22	-29	
	-7	-9	-8	-7	-7	-9	-14	-22	
16°	-7	-7	-7	-8	-8	-12	-18	-24	
	-5	-6	-8	-11	-11	-13	-18	-24	
24-36°	-5	-6	-7	-9	-10	-14	-18	-21	
	-4	-6	-8	-11	-12	-16	-20	-24	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-10	-9	-6	-4	-7	-14	-21	-28	
	-6	-7	-8	-7	-7	-8	-13	-20	
16°	-6	-6	-7	-8	-8	-11	-18	-23	
	-3	-4	-8	-11	-11	-13	-17	-23	
24-36°	-4	-5	-7	-9	-10	-13	-17	-20	
	-2	-4	-8	-11	-12	-15	-19	-23	

SK10317

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-7	-3	-1	0	0	0	0	0



JM AEROFOIL

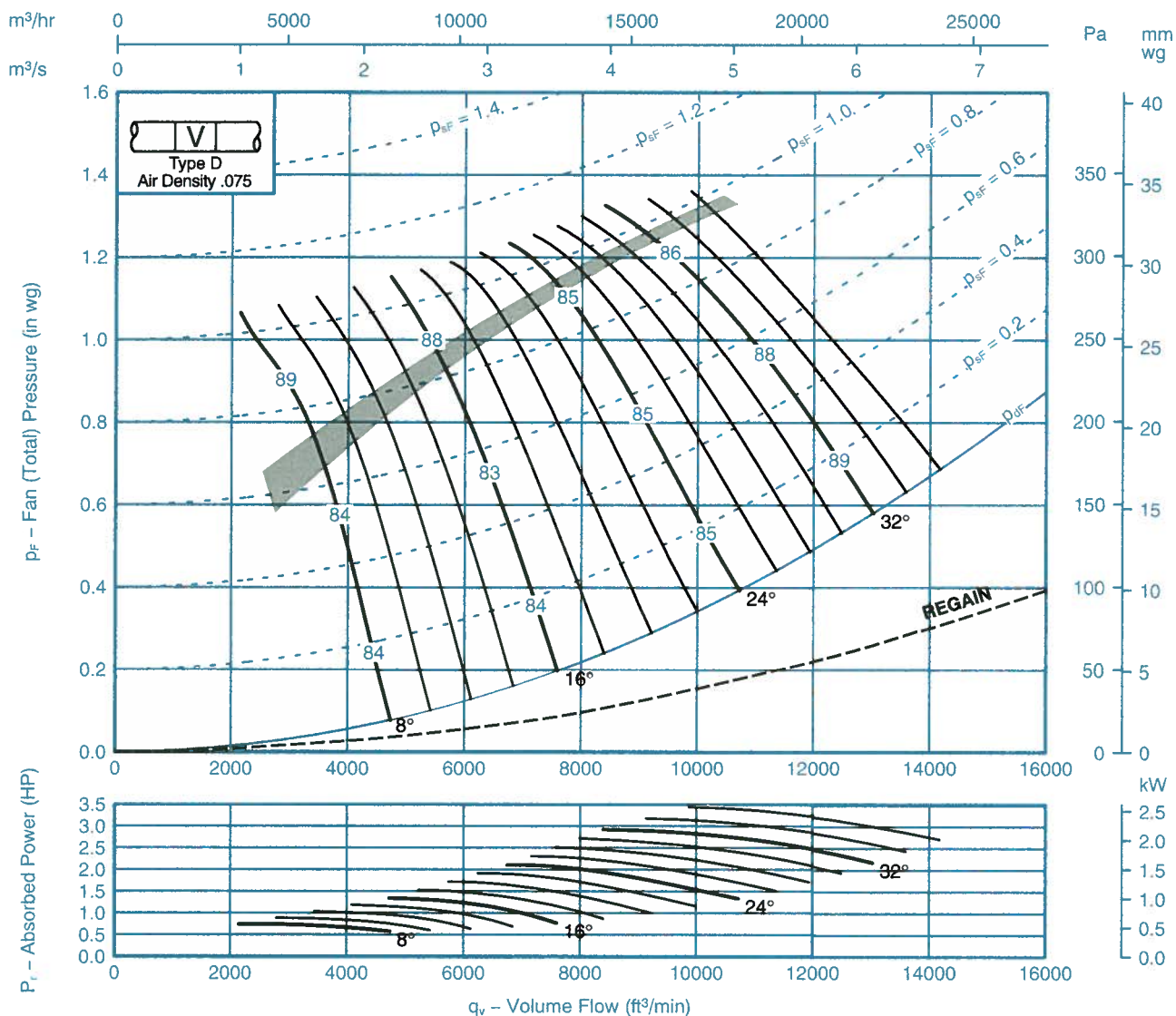
Fan Code: 71JM/25/6/9/...
 710 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-11	-8	-9	-4	-6	-13	-21	-29
	-11	-9	-8	-7	-7	-8	-14	-23
16°	-10	-9	-6	-5	-8	-14	-19	-26
	-8	-6	-6	-8	-9	-11	-16	-23
24-36°	-7	-7	-6	-8	-10	-13	-17	-20
	-6	-6	-6	-9	-11	-15	-19	-23

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-9	-7	-8	-4	-6	-13	-21	-28
	-9	-7	-7	-7	-7	-7	-13	-21
16°	-9	-7	-6	-5	-8	-13	-19	-25
	-7	-5	-5	-8	-9	-11	-16	-22
24-36°	-5	-5	-6	-8	-9	-12	-16	-19
	-3	-4	-5	-9	-11	-14	-18	-22

SK10318

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-7	-3	-1	0	0	0	0	0



JM AEROFOIL

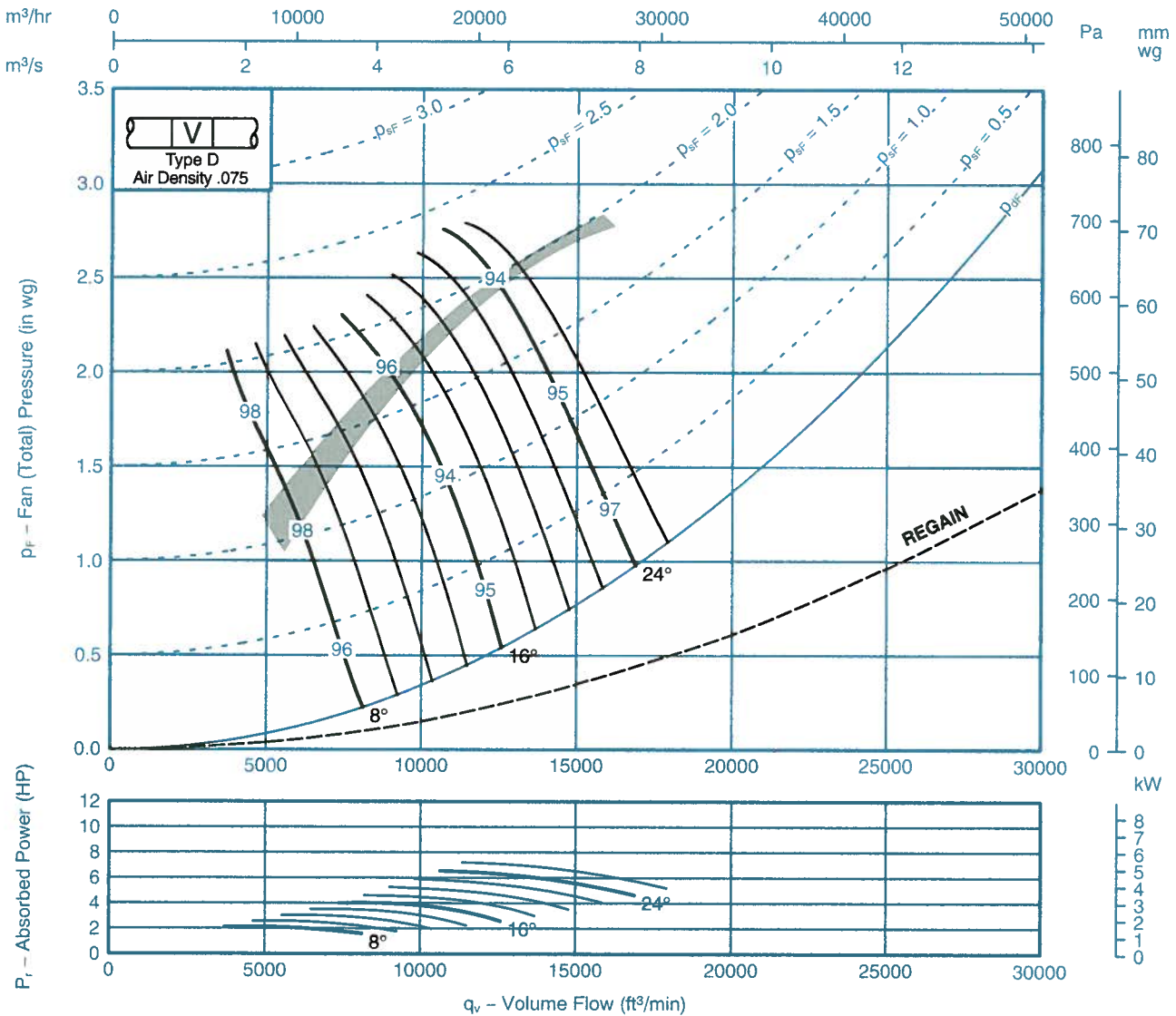
Fan Code: 71JM/20/4/6/...
710 mm 1770 RPM
6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-11	-8	-4	-8	-12	-19	-25
	-18	-12	-9	-5	-5	-8	-16	-22
16°	-17	-11	-7	-4	-9	-11	-19	-25
	-11	-6	-7	-7	-10	-10	-15	-19
24-26°	-10	-6	-8	-7	-11	-12	-16	-19
	-8	-5	-7	-9	-13	-14	-18	-22

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-9	-7	-4	-8	-11	-18	-23
	-18	-11	-9	-5	-5	-7	-16	-21
16°	-15	-11	-6	-4	-8	-10	-18	-22
	-11	-6	-7	-7	-10	-10	-14	-18
24-26°	-9	-6	-7	-7	-11	-11	-15	-18
	-7	-4	-7	-9	-12	-14	-17	-20

SK10319

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-7	-3	-1	0	0	0	0	0



JM AEROFOIL

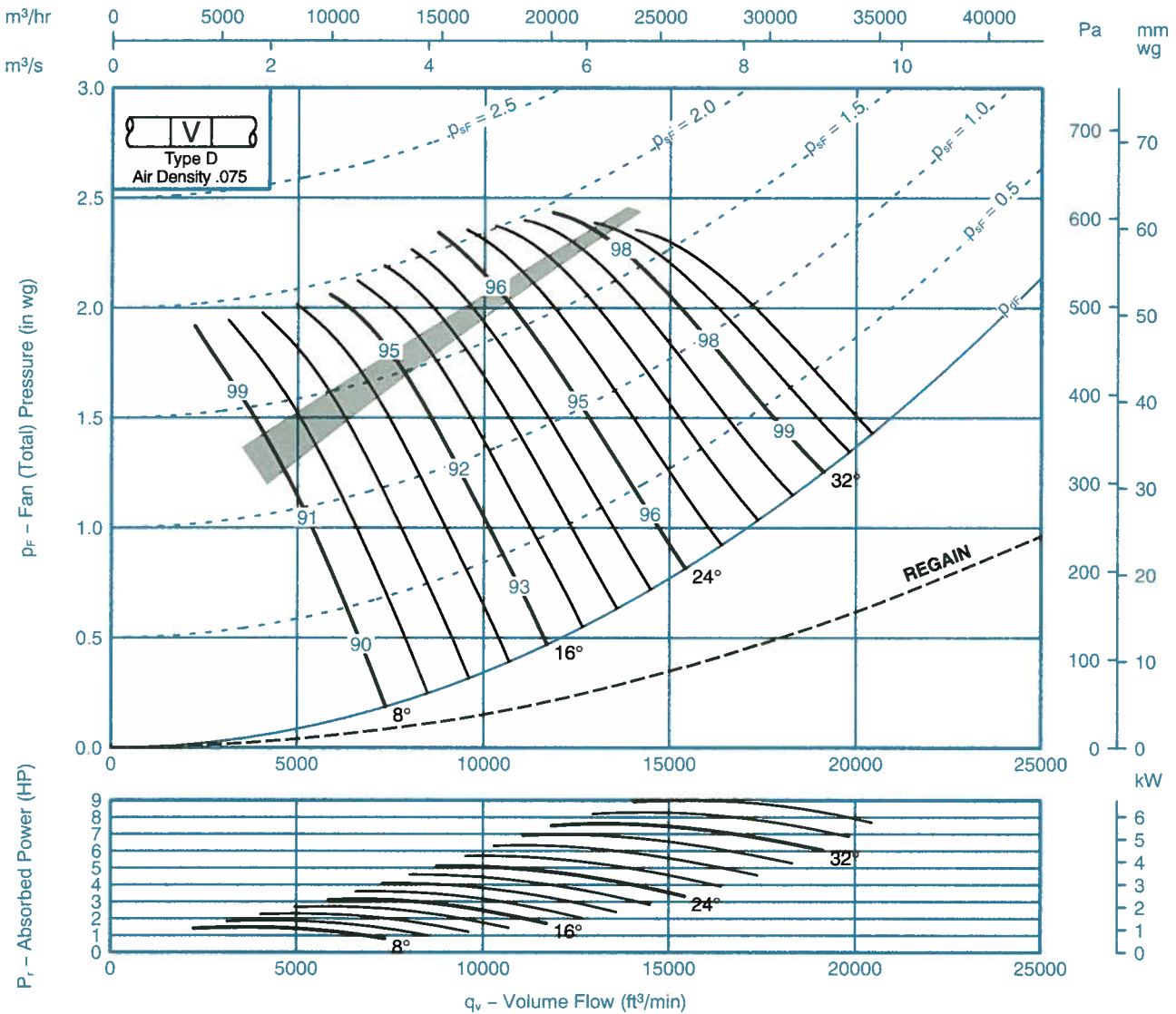
Fan Code: 71JM/25/4/6/...
 710 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-15	-13	-10	-5	-5	-11	-18	-25
	Lower	-11	-8	-10	-8	-8	-9	-11	-18
16°	Upper	-9	-9	-7	-8	-8	-11	-15	-22
	Lower	-8	-6	-6	-10	-12	-14	-15	-21
24-36°	Upper	-5	-7	-8	-9	-11	-13	-17	-21
	Lower	-5	-6	-8	-9	-12	-15	-18	-23

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-12	-11	-9	-5	-4	-10	-17	-23
	Lower	-10	-7	-8	-8	-7	-8	-9	-16
16°	Upper	-8	-7	-6	-7	-8	-10	-14	-20
	Lower	-7	-5	-5	-9	-12	-13	-15	-20
24-36°	Upper	-4	-6	-7	-8	-10	-12	-16	-19
	Lower	-3	-4	-7	-9	-12	-14	-17	-21

SK10320

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-7	-3	-1	0	0	0	0	0



JM AEROFOIL

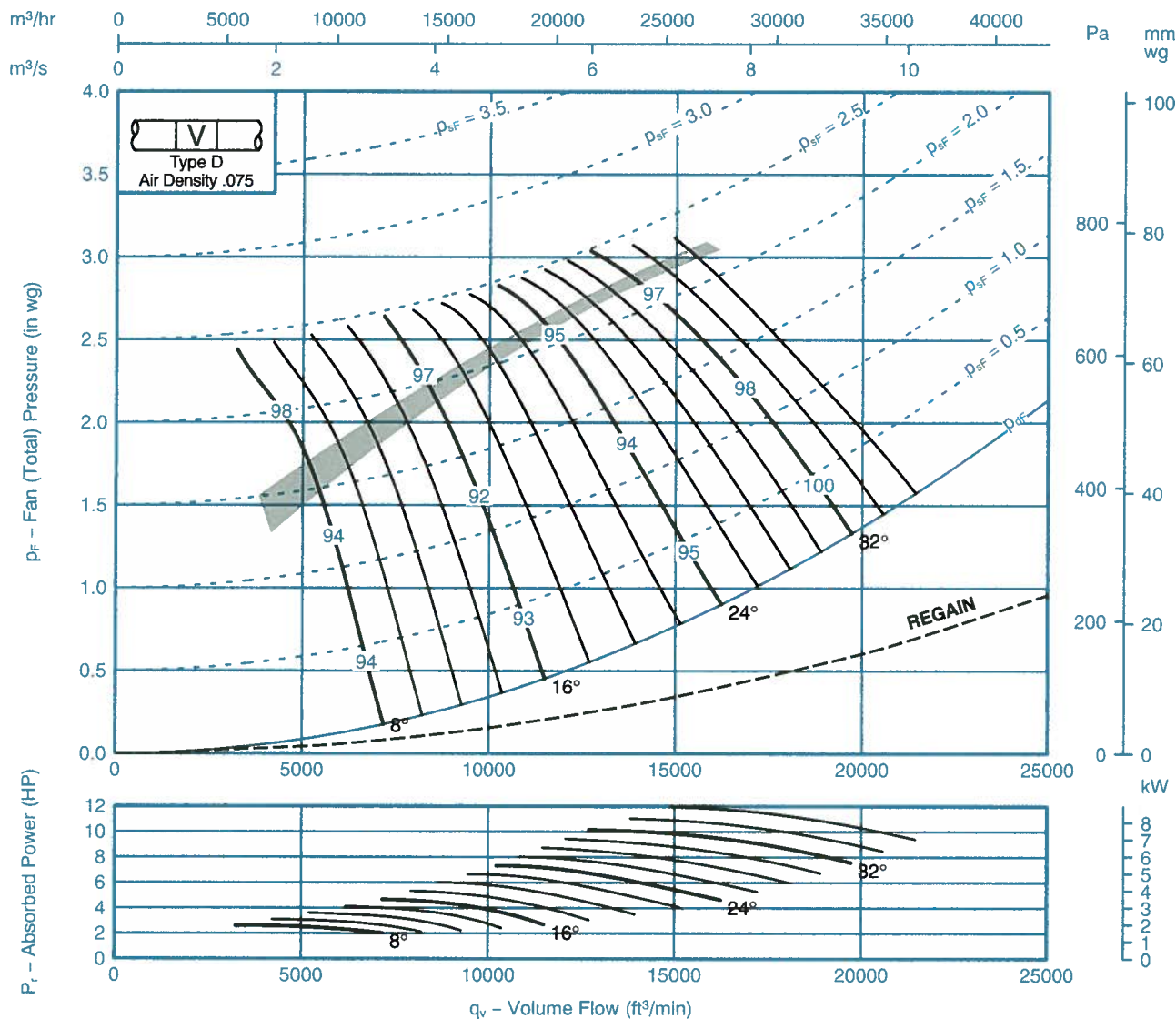
Fan Code: 71JM/25/4/9/...
 710 mm 1770 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-11	-9	-7	-5	-9	-16	-25
	-12	-11	-9	-8	-7	-8	-9	-19
16°	-10	-11	-9	-5	-7	-11	-16	-23
	-7	-10	-7	-7	-10	-11	-13	-20
24-36°	-5	-10	-8	-8	-11	-13	-16	-20
	-5	-9	-8	-8	-12	-14	-17	-22

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-9	-10	-7	-6	-5	-8	-16	-23
	-10	-10	-7	-7	-7	-7	-8	-17
16°	-8	-10	-7	-5	-6	-10	-16	-22
	-6	-10	-4	-7	-10	-11	-12	-19
24-36°	-3	-9	-6	-7	-10	-12	-14	-18
	-3	-8	-5	-7	-11	-13	-16	-21

SK10321

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-7	-3	-1	0	0	0	0	0



JM AEROFOIL

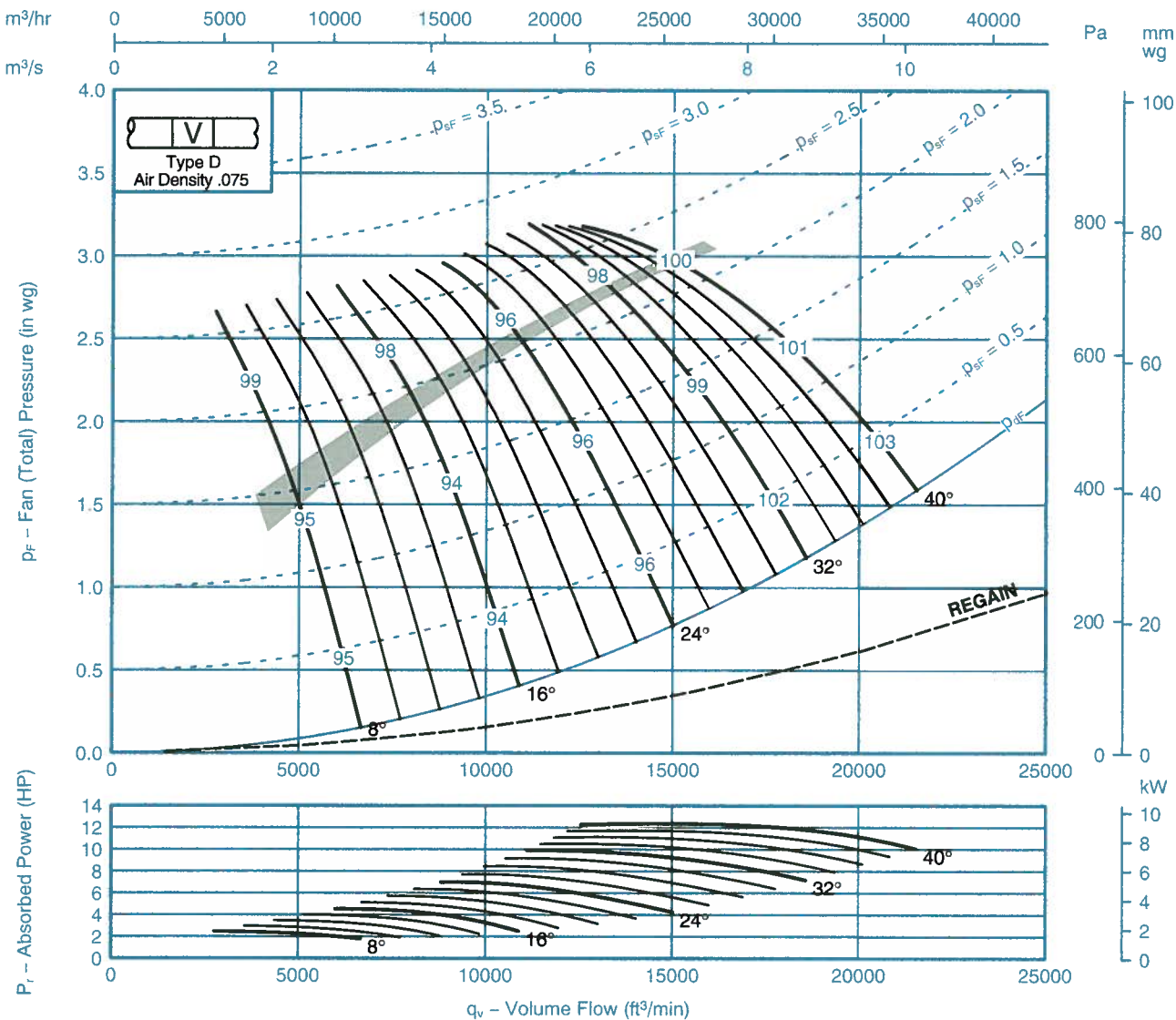
Fan Code: 71JM/31/4/9/...
 710 mm 1770 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-11	-9	-7	-5	-9	-16	-25
	-12	-11	-9	-8	-7	-8	-9	-19
16°	-10	-11	-9	-5	-7	-11	-16	-23
	-7	-10	-7	-7	-10	-11	-13	-20
24-40°	-5	-10	-8	-8	-11	-13	-16	-20
	-5	-9	-8	-8	-12	-14	-17	-22

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-9	-10	-7	-6	-5	-8	-16	-23
	-10	-10	-7	-7	-7	-7	-8	-17
16°	-8	-10	-7	-5	-6	-10	-16	-22
	-6	-10	-4	-7	-10	-11	-12	-19
24-40°	-3	-9	-6	-7	-10	-12	-14	-18
	-3	-8	-5	-7	-11	-13	-16	-21

SK10632

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-7	-3	-1	0	0	0	0	0



JM AEROFOIL

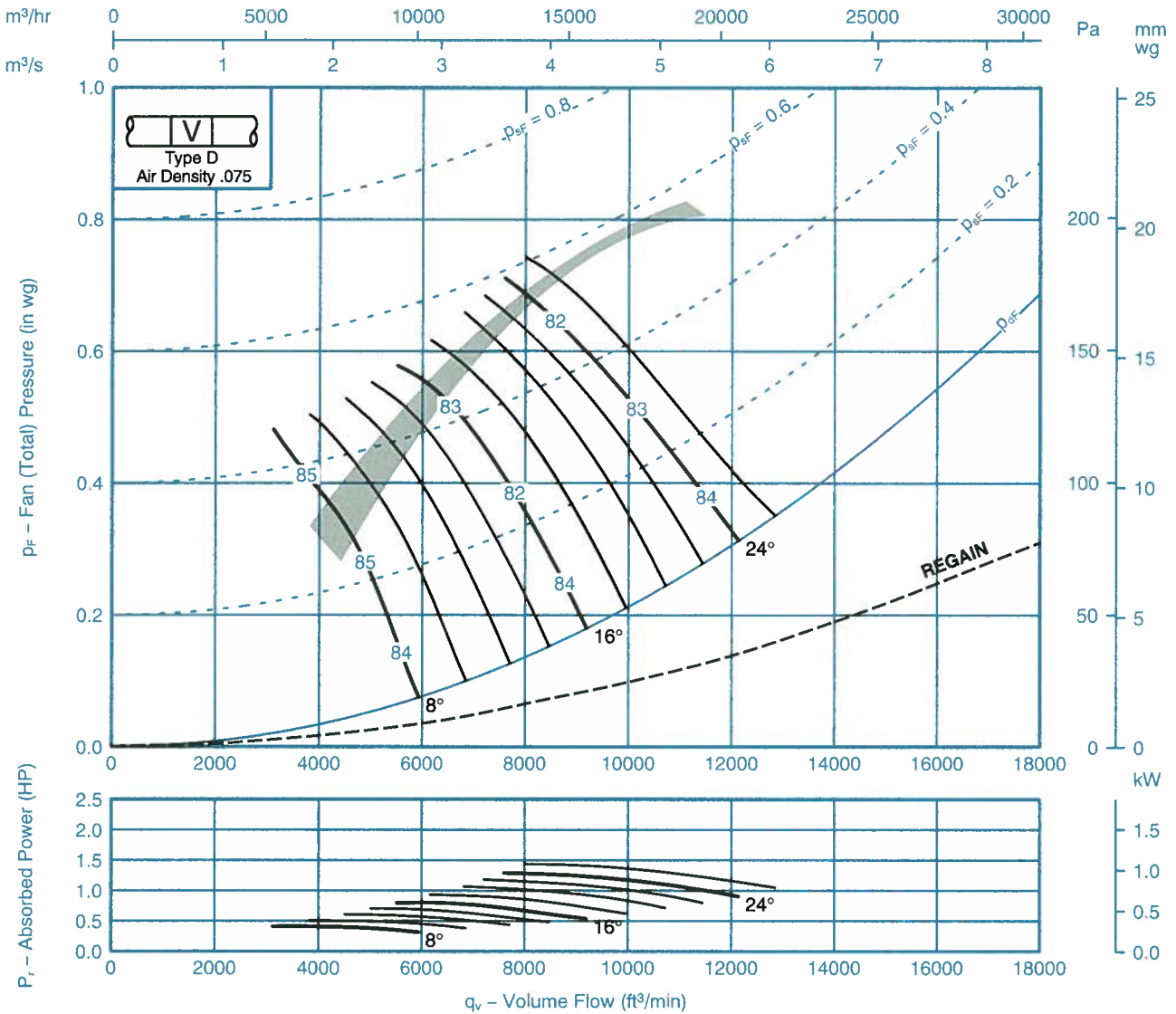
Fan Code: 80JM/20/8/6/...
 800 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-13	-7	-4	-7	-10	-18	-24	-31
	Lower	-14	-9	-6	-5	-7	-16	-21	-28
16°	Upper	-14	-5	-3	-9	-11	-19	-24	-32
	Lower	-7	-6	-7	-9	-9	-13	-18	-23
24-26°	Upper	-8	-7	-6	-9	-8	-13	-16	-22
	Lower	-5	-6	-7	-11	-11	-15	-18	-23

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-11	-7	-4	-7	-10	-18	-23	-29
	Lower	-13	-9	-6	-5	-7	-14	-20	-27
16°	Upper	-13	-5	-3	-9	-11	-19	-23	-30
	Lower	-7	-6	-7	-9	-9	-13	-17	-22
24-26°	Upper	-7	-7	-6	-9	-8	-13	-15	-21
	Lower	-5	-6	-7	-11	-11	-14	-17	-22

SK10322

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-3	-1	0	0	0	0	0



JM AEROFOIL

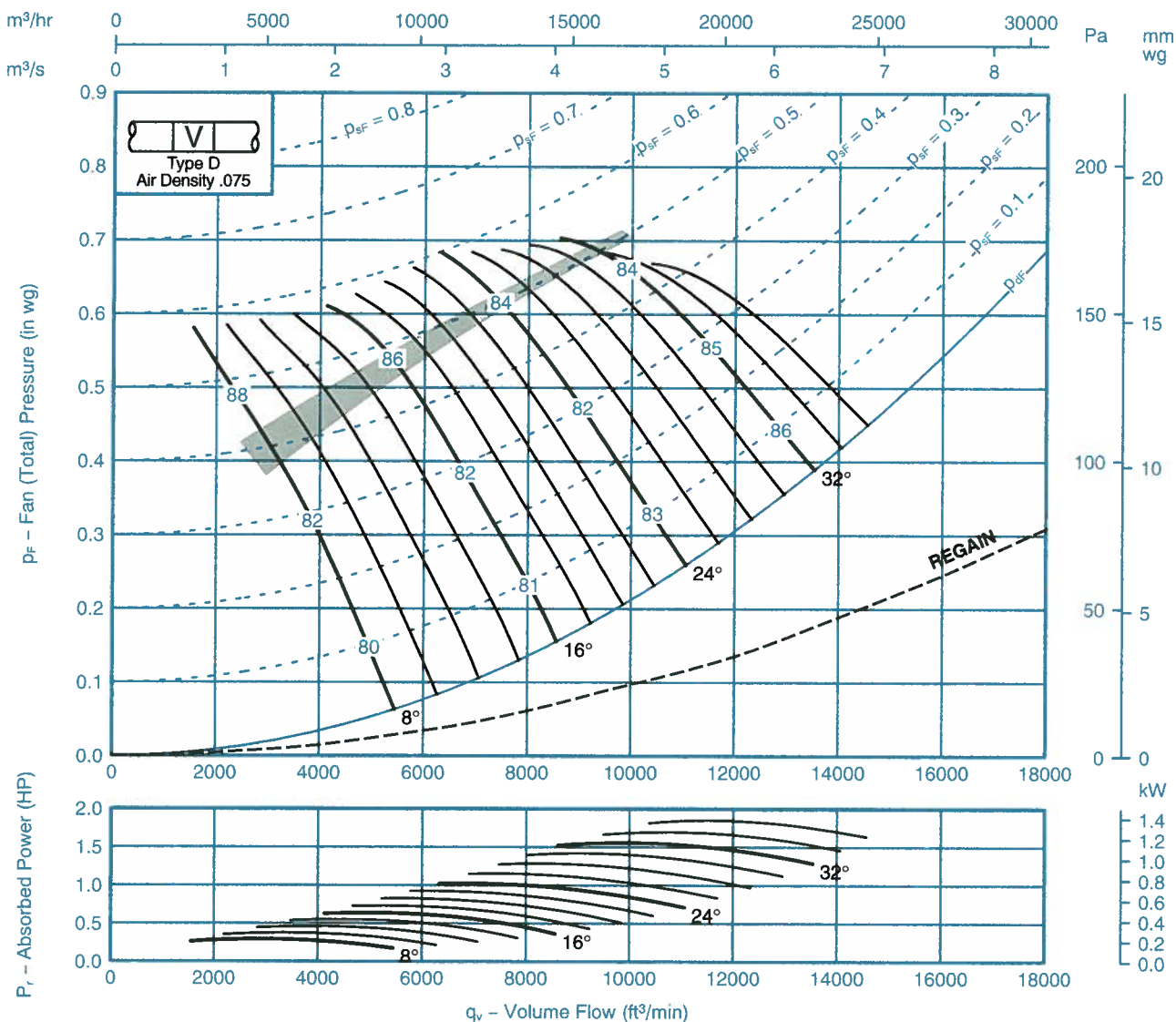
Fan Code: 80JM/25/8/6/...
 800 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-12	-5	-3	-11	-17	-24	-32
	-11	-12	-7	-4	-7	-12	-17	-24
16°	-9	-7	-8	-4	-10	-15	-21	-28
	-6	-4	-9	-10	-12	-15	-19	-24
24-36°	-6	-7	-7	-7	-10	-14	-17	-22
	-5	-7	-7	-8	-11	-15	-17	-22

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-13	-11	-5	-4	-11	-17	-23	-30
	-11	-12	-7	-6	-7	-10	-17	-23
16°	-8	-7	-8	-5	-10	-15	-20	-26
	-5	-4	-9	-11	-13	-14	-18	-22
24-36°	-5	-7	-7	-7	-11	-14	-16	-21
	-5	-7	-7	-8	-12	-14	-16	-20

SK10323

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-3	0	0	0	0	0	0



JM AEROFOIL

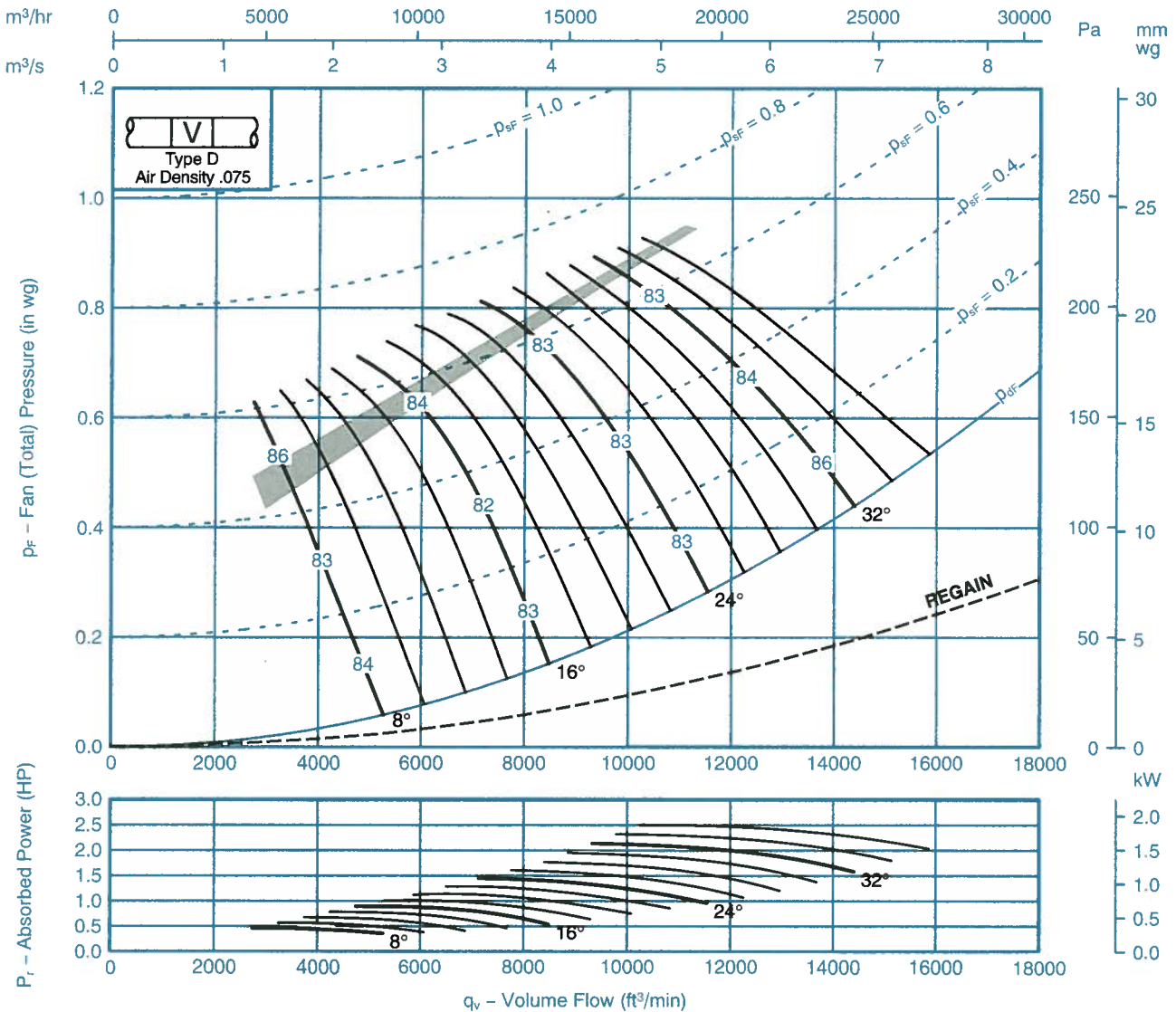
Fan Code: 80JM/25/8/9/...
 800 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-10	-9	-6	-4	-9	-16	-25	-33
	-10	-9	-7	-6	-8	-9	-18	-26
16°	-9	-7	-5	-6	-11	-16	-24	-28
	-10	-7	-5	-8	-10	-14	-18	-25
24-36°	-9	-8	-6	-6	-10	-13	-16	-21
	-9	-7	-5	-7	-11	-14	-17	-22

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-9	-7	-6	-6	-9	-16	-24	-31
	-10	-8	-7	-7	-8	-8	-18	-24
16°	-8	-7	-5	-6	-11	-16	-20	-26
	-9	-6	-5	-8	-10	-13	-18	-23
24-36°	-8	-8	-6	-6	-10	-13	-15	-19
	-8	-6	-5	-8	-11	-14	-16	-21

SK10324

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-3	0	0	0	0	0	0



JM AEROFOIL

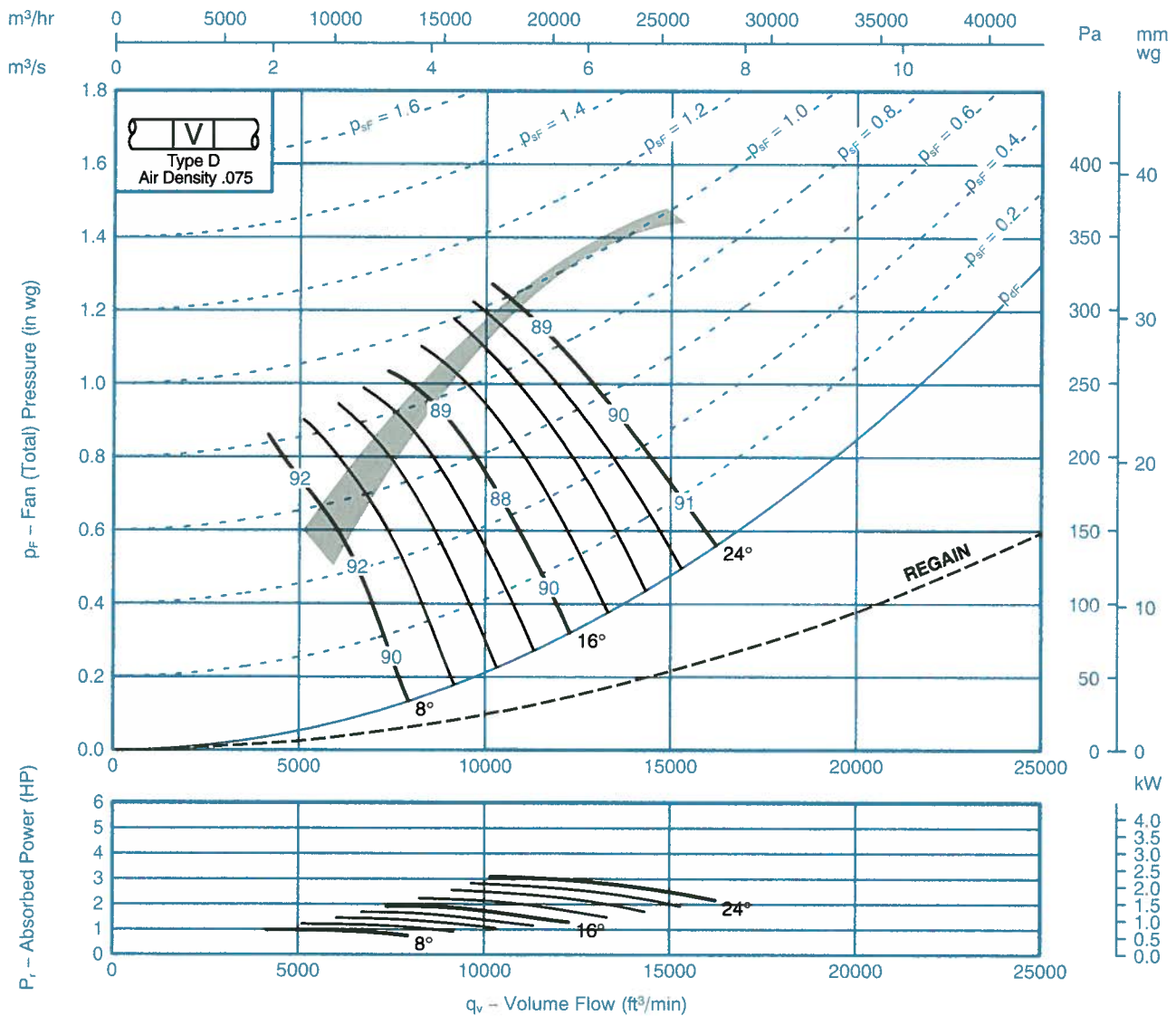
Fan Code: 80JM/20/6/6/...
 800 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-16	-10	-4	-5	-8	-15	-21	-28
	-17	-11	-7	-5	-5	-12	-18	-25
16°	-16	-9	-3	-6	-10	-16	-21	-28
	-10	-6	-7	-8	-8	-12	-15	-21
24°	-10	-6	-7	-8	-8	-11	-14	-20
	-7	-5	-7	-10	-11	-14	-16	-22

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-8	-4	-5	-8	-15	-20	-25
	-17	-10	-7	-5	-5	-11	-18	-23
16°	-15	-9	-3	-6	-10	-16	-21	-26
	-9	-6	-7	-8	-8	-12	-15	-19
24°	-9	-6	-7	-8	-8	-11	-13	-18
	-7	-4	-7	-10	-11	-13	-15	-20

SK10325

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-3	0	0	0	0	0	0



JM AEROFOIL

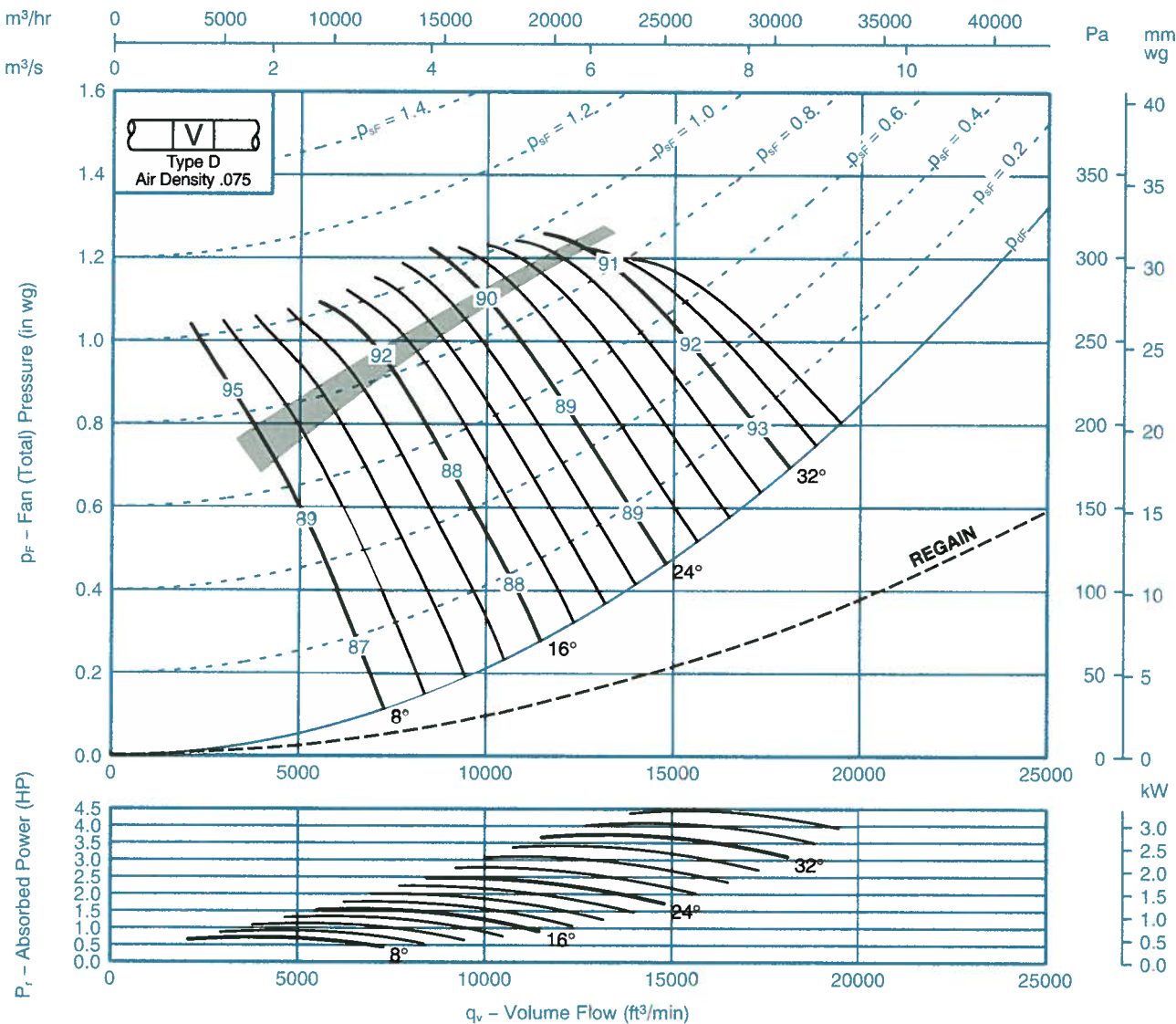
Fan Code: 80JM/25/6/6/...
 800 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-14	-7	-3	-6	-15	-21	-28
	-11	-13	-10	-6	-5	-9	-15	-22
16°	-9	-9	-9	-5	-6	-13	-18	-25
	-6	-6	-8	-10	-10	-13	-16	-21
24-36°	-6	-7	-8	-8	-8	-13	-16	-20
	-5	-7	-8	-8	-9	-14	-17	-21

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-14	-13	-7	-5	-7	-14	-20	-26
	-11	-13	-10	-7	-5	-8	-15	-20
16°	-8	-9	-9	-6	-7	-13	-18	-23
	-5	-5	-8	-10	-11	-13	-16	-20
24-36°	-5	-7	-8	-8	-9	-13	-15	-19
	-5	-7	-8	-9	-10	-13	-16	-19

SK10326

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-3	0	0	0	0	0	0



JM AEROFOIL

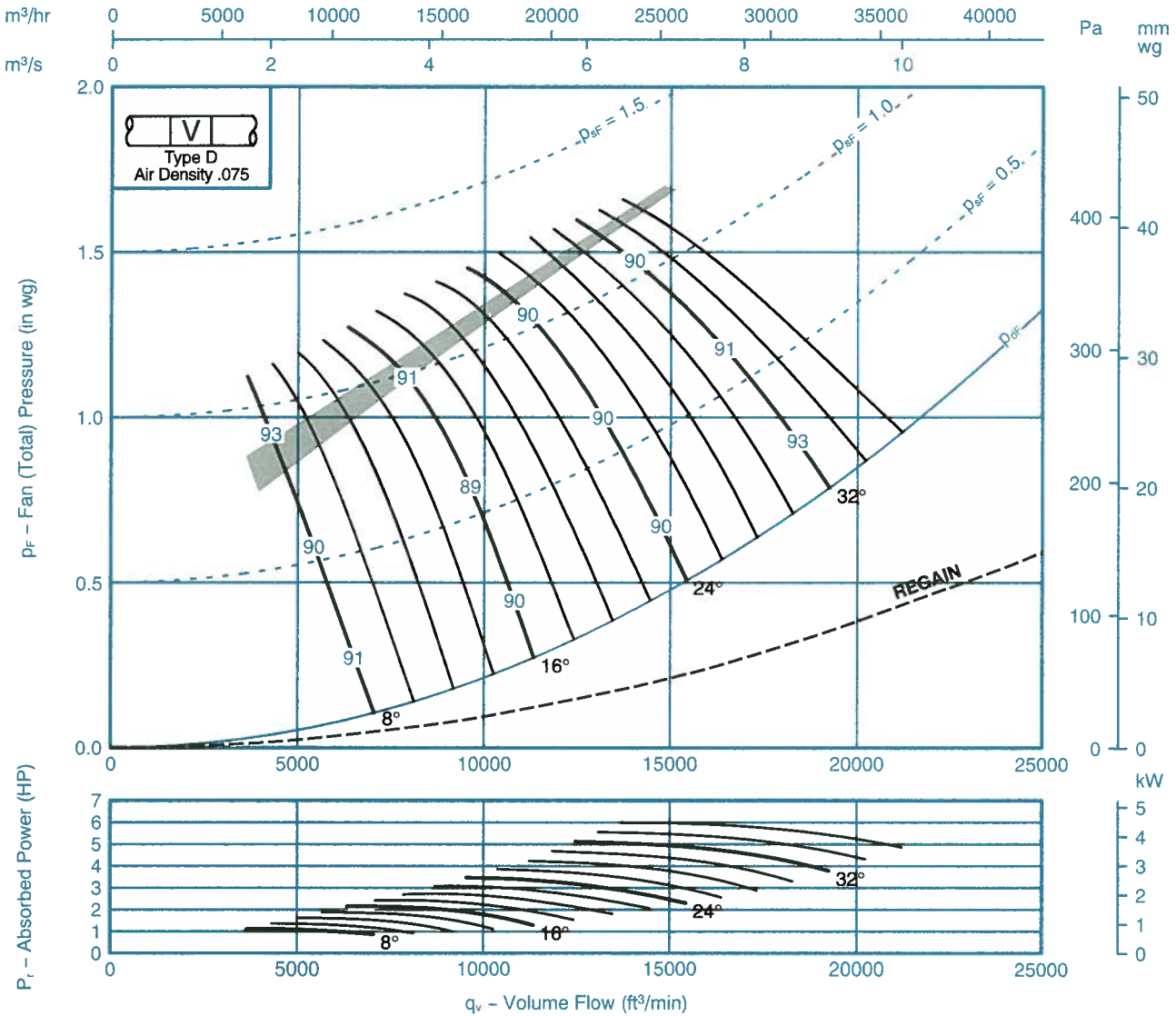
Fan Code: 80JM/25/6/9/...
 800 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-11	-9	-9	-4	-6	-13	-21	-29
	-10	-9	-8	-7	-7	-8	-14	-23
16°	-9	-11	-5	-6	-7	-14	-19	-25
	-8	-8	-5	-8	-8	-12	-16	-22
24-36°	-7	-10	-7	-7	-8	-12	-15	-19
	-7	-8	-6	-7	-9	-13	-16	-21

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-10	-7	-9	-6	-7	-13	-21	-27
	-10	-8	-8	-8	-7	-7	-14	-22
16°	-8	-11	-5	-6	-9	-14	-18	-23
	-8	-8	-5	-8	-8	-12	-16	-21
24-36°	-6	-10	-7	-8	-8	-12	-14	-18
	-7	-8	-6	-8	-9	-13	-15	-19

SK10327

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-3	0	0	0	0	0	0



JM AEROFOIL

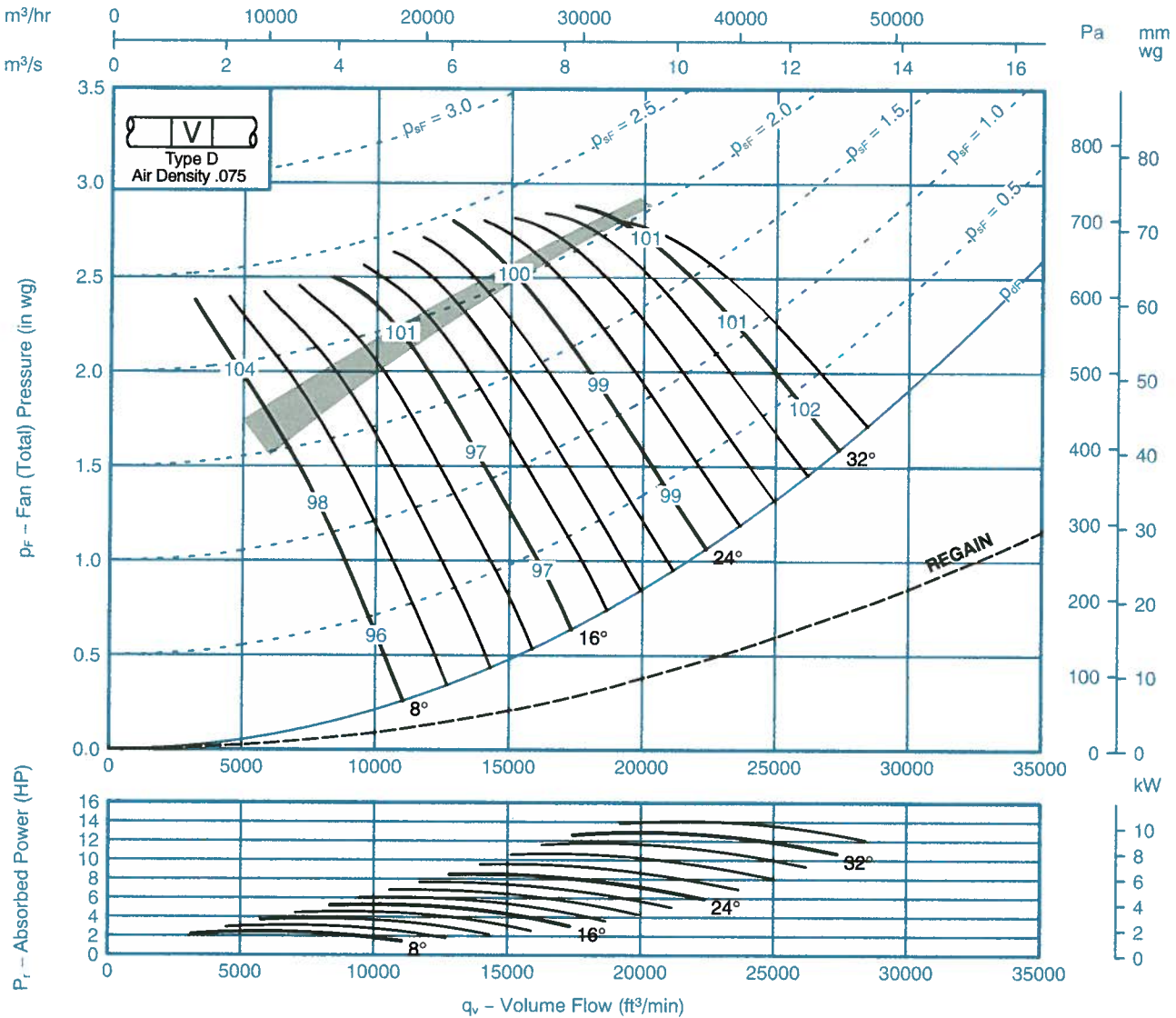
Fan Code: 80JM/25/4/6/...
 800 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-16	-16	-12	-6	-3	-11	-18	-24
	Lower	-14	-11	-13	-8	-5	-7	-12	-18
16°	Upper	-11	-9	-7	-8	-5	-10	-16	-21
	Lower	-10	-6	-5	-9	-11	-13	-15	-19
24-34°	Upper	-6	-7	-9	-9	-8	-11	-15	-18
	Lower	-7	-6	-8	-8	-9	-12	-16	-19

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-15	-14	-12	-7	-4	-10	-17	-22
	Lower	-14	-11	-13	-9	-5	-5	-11	-16
16°	Upper	-10	-9	-7	-9	-5	-10	-15	-20
	Lower	-9	-6	-5	-10	-11	-13	-15	-18
24-34°	Upper	-5	-7	-8	-9	-8	-11	-15	-17
	Lower	-6	-6	-8	-9	-9	-12	-15	-17

SK10329

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-3	0	0	0	0	0	0



JM AEROFOIL

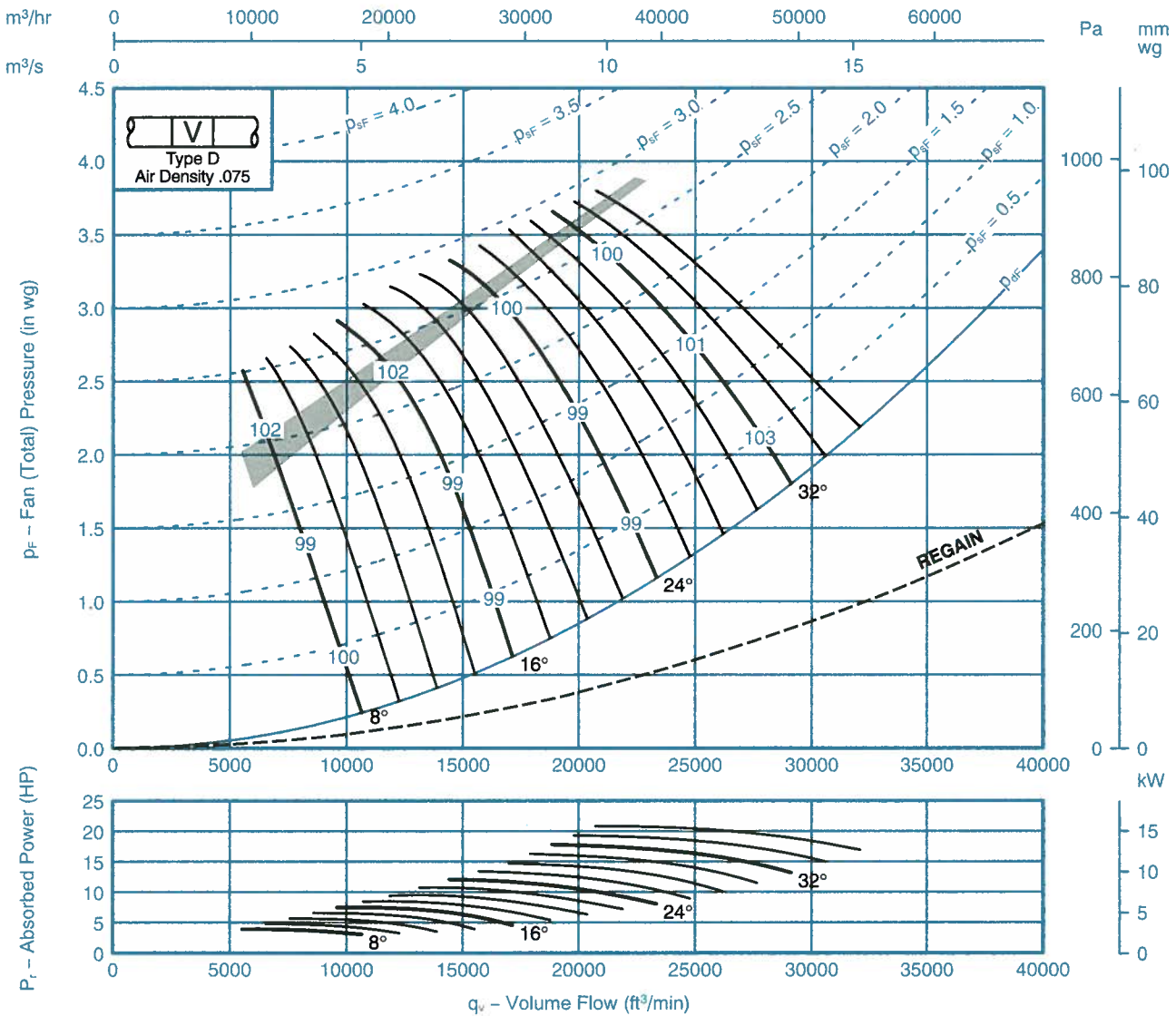
Fan Code: 80JM/25/4/9/...
 800 mm 1770 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-10	-11	-10	-7	-5	-9	-16	-25
	Lower	-10	-11	-10	-8	-7	-8	-9	-19
16°	Upper	-7	-10	-8	-6	-7	-12	-17	-22
	Lower	-6	-11	-8	-6	-9	-11	-15	-19
24-36°	Upper	-4	-12	-11	-8	-8	-12	-15	-18
	Lower	-6	-10	-9	-7	-8	-12	-15	-19

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-8	-11	-8	-8	-5	-9	-15	-23
	Lower	-10	-11	-9	-9	-7	-7	-9	-17
16°	Upper	-6	-10	-8	-6	-7	-12	-16	-20
	Lower	-6	-11	-8	-7	-9	-10	-14	-18
24-36°	Upper	-3	-12	-11	-9	-8	-12	-14	-17
	Lower	-5	-10	-8	-8	-8	-12	-14	-17

SK10330

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-3	0	0	0	0	0	0



JM AEROFOIL

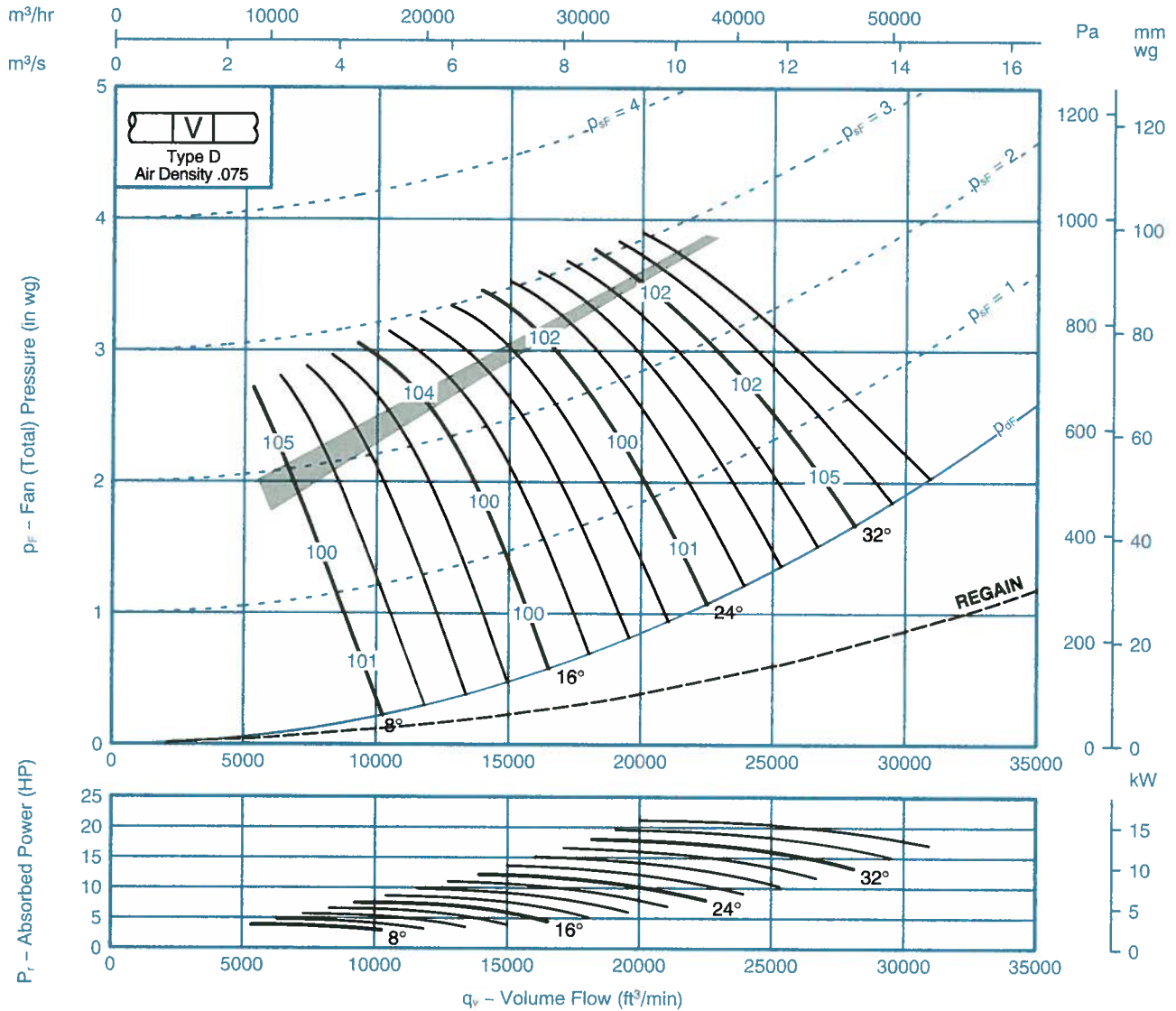
Fan Code: 80JM/31/4/9/...
 800 mm 1770 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-10	-11	-10	-7	-5	-9	-16	-25
	-10	-11	-10	-8	-7	-8	-9	-19
16°	-7	-10	-8	-6	-7	-12	-17	-22
	-6	-11	-8	-6	-9	-11	-15	-19
24-40°	-4	-12	-11	-8	-8	-12	-15	-18
	-6	-10	-9	-7	-8	-12	-15	-19

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-8	-11	-8	-8	-5	-9	-15	-23
	-10	-11	-9	-9	-7	-7	-9	-17
16°	-6	-10	-8	-6	-7	-12	-16	-20
	-6	-11	-8	-7	-9	-10	-14	-18
24-40°	-3	-12	-11	-9	-8	-12	-14	-17
	-5	-10	-8	-8	-8	-12	-14	-17

SK10633

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-3	0	0	0	0	0	0



JM AEROFOIL

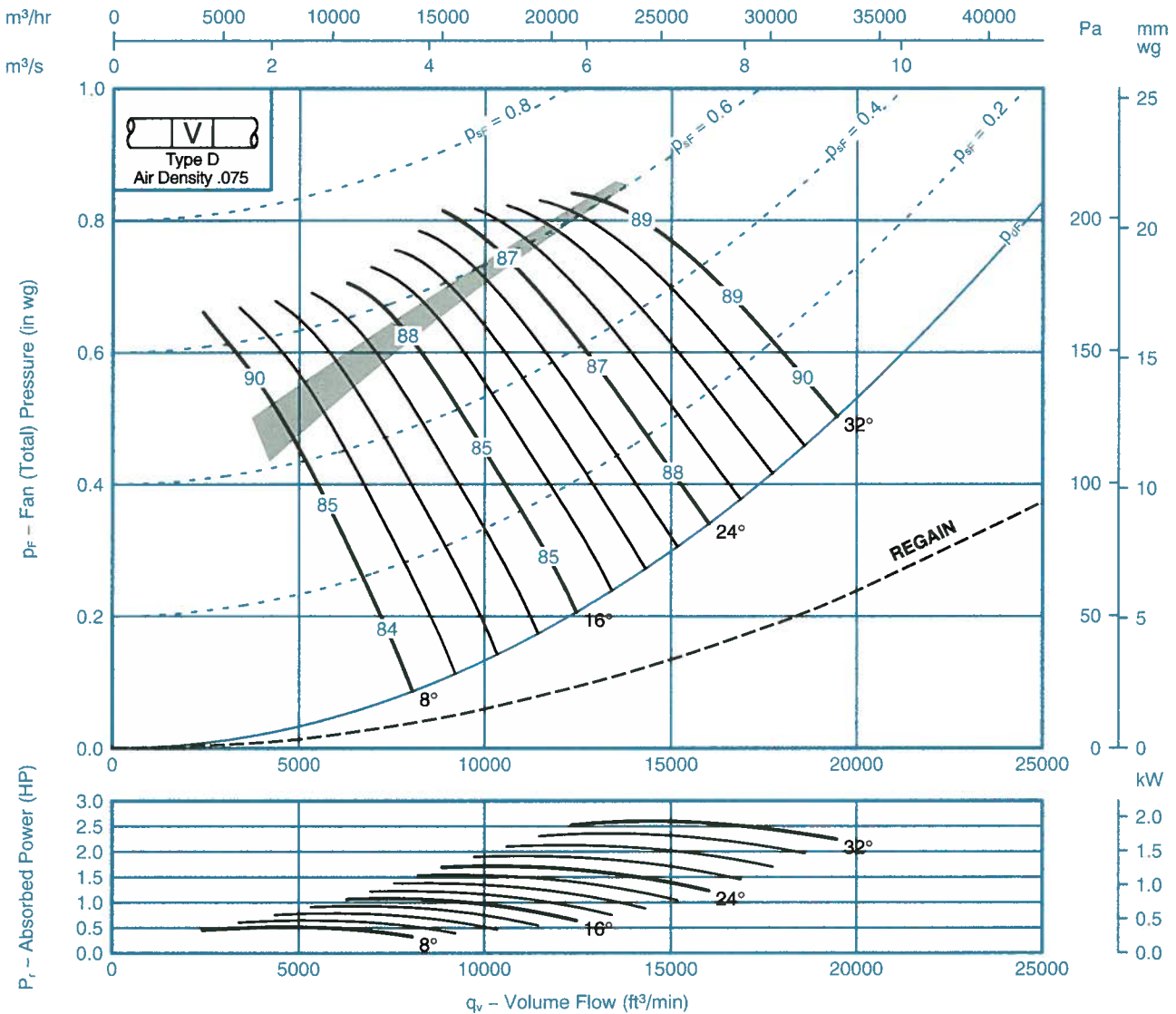
Fan Code: 90JM/25/8/6/...
 900 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-12	-5	-3	-9	-15	-21	-29
	-10	-11	-9	-6	-6	-10	-16	-23
16°	-12	-10	-7	-4	-8	-14	-20	-27
	-6	-6	-8	-8	-10	-13	-17	-23
24-32°	-7	-8	-7	-7	-9	-13	-17	-22
	-5	-7	-8	-8	-10	-13	-17	-22

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-14	-12	-5	-3	-9	-15	-21	-27
	-10	-11	-9	-5	-5	-9	-15	-21
16°	-10	-10	-7	-4	-8	-14	-19	-25
	-6	-6	-8	-8	-10	-12	-16	-22
24-32°	-6	-7	-7	-7	-9	-13	-16	-21
	-4	-7	-8	-8	-10	-13	-16	-20

SK10331

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-2	0	0	0	0	0	0



JM AEROFOIL

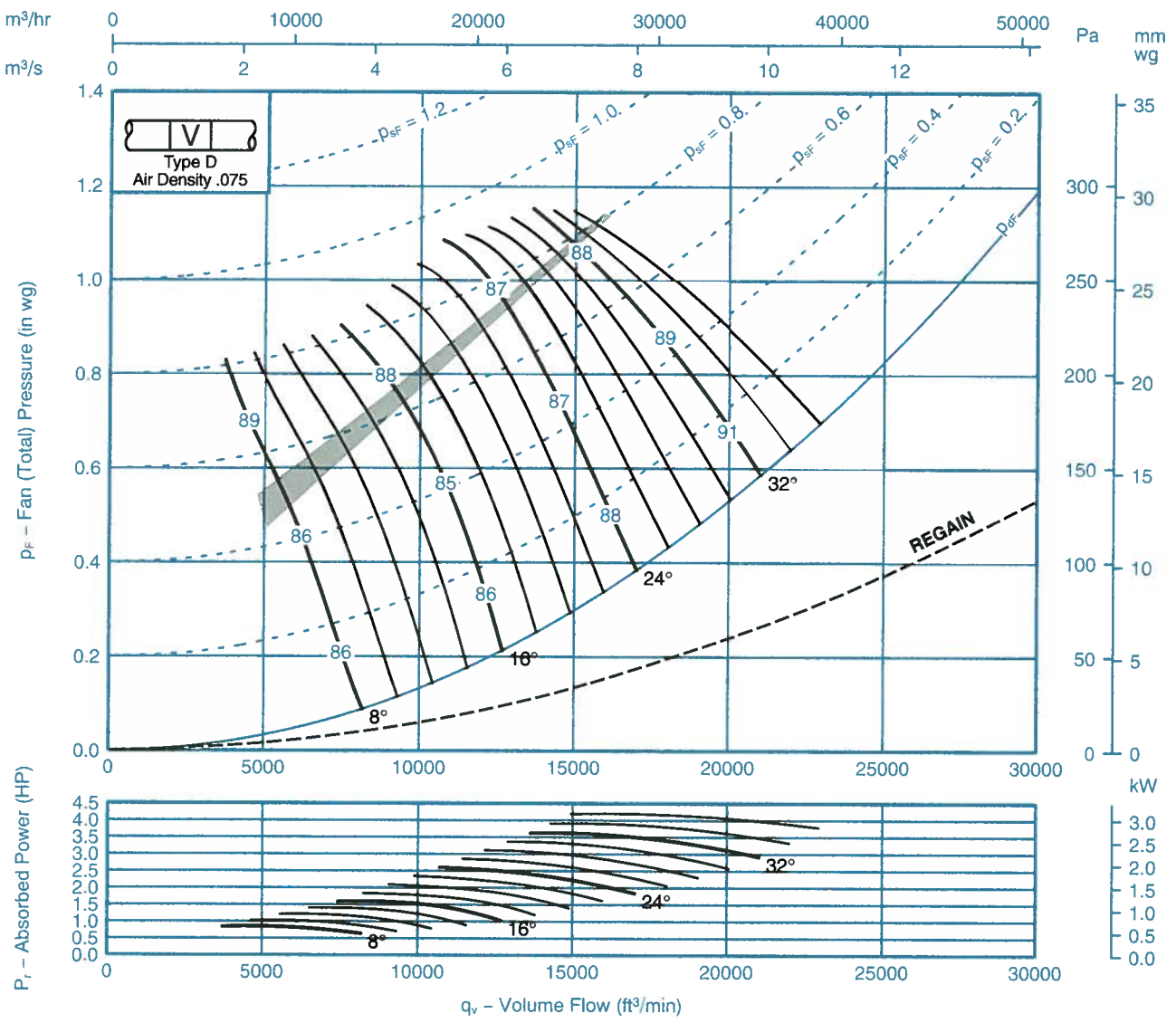
Fan Code: 90JM/25/8/9/...
 900 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-15	-11	-7	-4	-7	-13	-21	-28
	Lower	-13	-9	-8	-6	-6	-8	-16	-22
16°	Upper	-12	-10	-6	-4	-8	-13	-19	-26
	Lower	-10	-7	-6	-7	-8	-12	-17	-23
24-36°	Upper	-9	-8	-7	-6	-8	-12	-15	-20
	Lower	-7	-7	-7	-8	-10	-13	-17	-22

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-14	-9	-7	-4	-7	-13	-20	-26
	Lower	-13	-9	-8	-6	-6	-7	-15	-21
16°	Upper	-11	-10	-6	-4	-8	-13	-18	-24
	Lower	-9	-7	-6	-7	-8	-12	-16	-21
24-36°	Upper	-7	-8	-7	-6	-8	-12	-14	-19
	Lower	-6	-6	-7	-8	-10	-13	-15	-20

SK10332

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-2	0	0	0	0	0	0



JM AEROFOIL

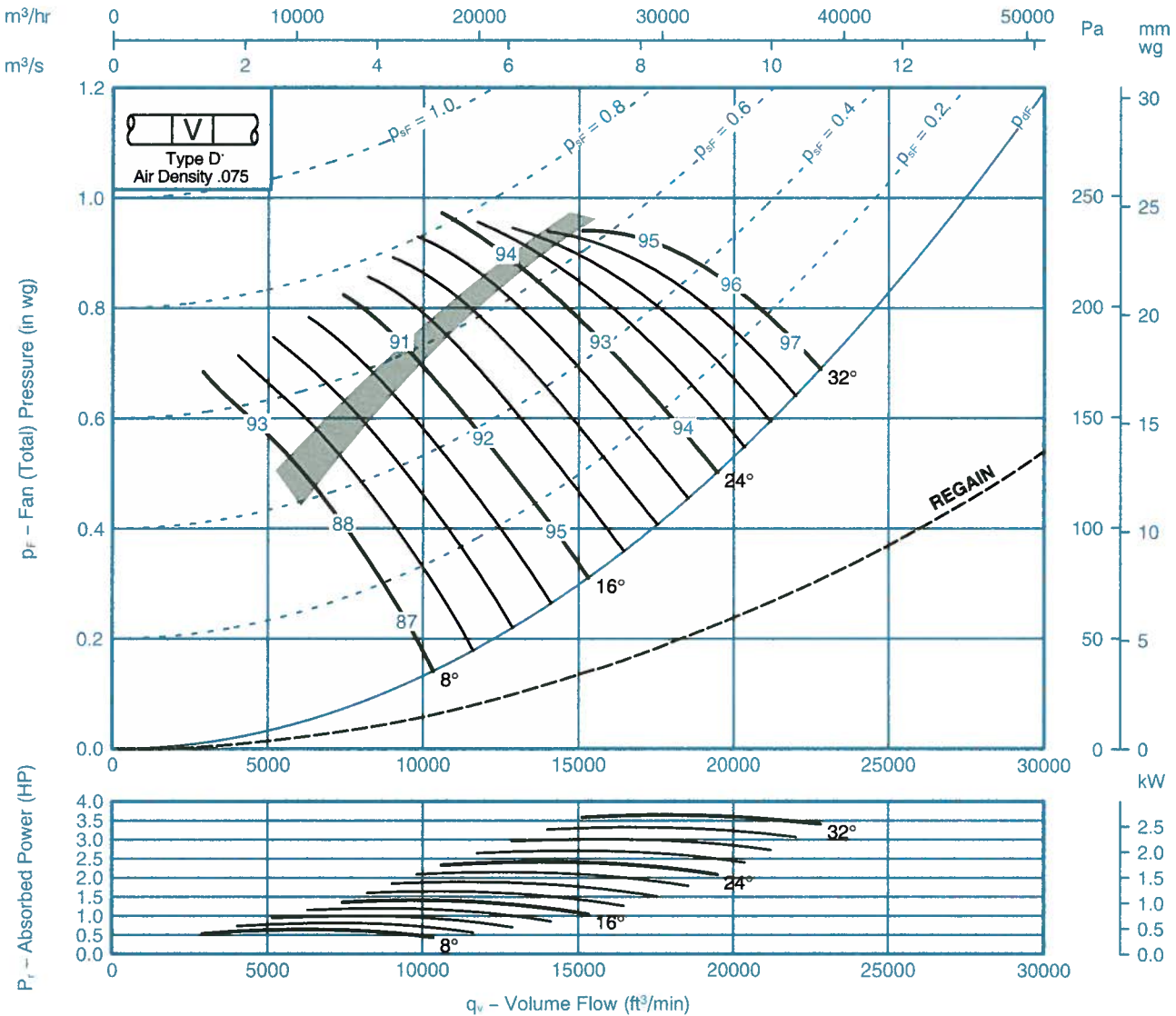
Fan Code: 90JM/25/6/3/...
 900 mm 1170 RPM
 3 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-10	-14	-8	-4	-7	-13	-19	-25	
	-4	-11	-9	-9	-9	-12	-15	-20	
16°	-3	-11	-10	-10	-11	-13	-16	-20	
	-2	-10	-11	-12	-13	-16	-18	-22	
24-32°	-4	-8	-8	-10	-11	-14	-17	-21	
	-3	-9	-10	-10	-11	-13	-16	-20	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-7	-14	-8	-4	-7	-13	-18	-22	
	-2	-11	-9	-9	-9	-10	-14	-18	
16°	-1	-11	-10	-10	-11	-13	-15	-17	
	-1	-10	-11	-12	-13	-15	-17	-20	
24-32°	-3	-7	-8	-10	-11	-13	-16	-19	
	-2	-9	-10	-10	-11	-13	-15	-17	

SK10704

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-2	0	0	0	0	0	0



JM AEROFOIL

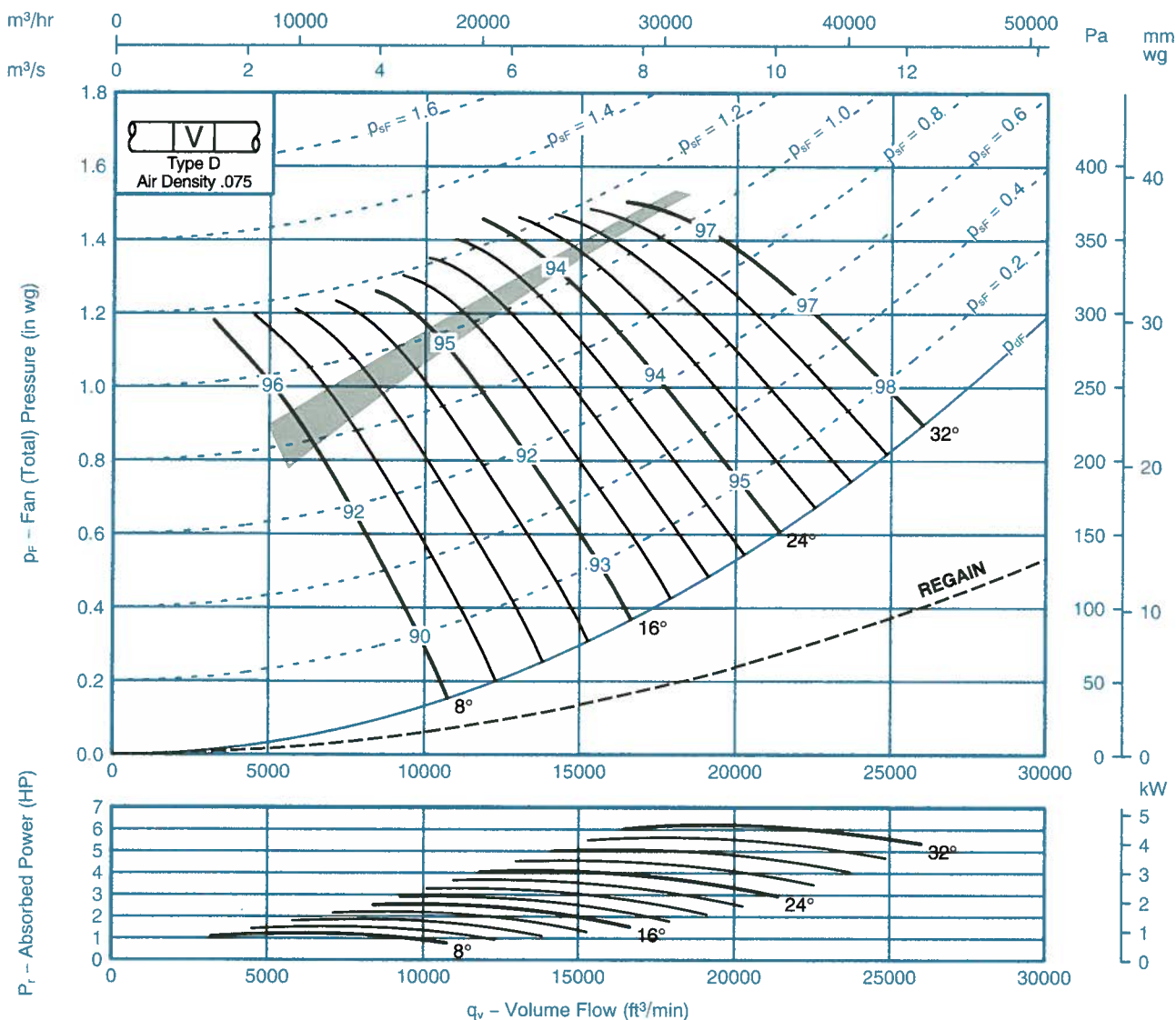
Fan Code: 90JM/25/6/6/...
 900 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-15	-8	-4	-6	-13	-19	-26
	-9	-13	-10	-9	-5	-9	-14	-21
16°	-10	-13	-10	-5	-6	-12	-18	-24
	-5	-9	-9	-10	-10	-12	-17	-22
24-32°	-6	-9	-8	-8	-8	-12	-16	-20
	-5	-8	-8	-9	-10	-13	-16	-21

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-13	-13	-7	-4	-6	-13	-18	-24
	-8	-12	-10	-9	-5	-7	-13	-19
16°	-8	-12	-10	-5	-5	-12	-17	-22
	-4	-8	-9	-9	-9	-11	-15	-20
24-32°	-5	-9	-8	-7	-8	-12	-15	-19
	-4	-7	-8	-9	-9	-12	-15	-19

SK10333

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-2	0	0	0	0	0	0



JM AEROFOIL

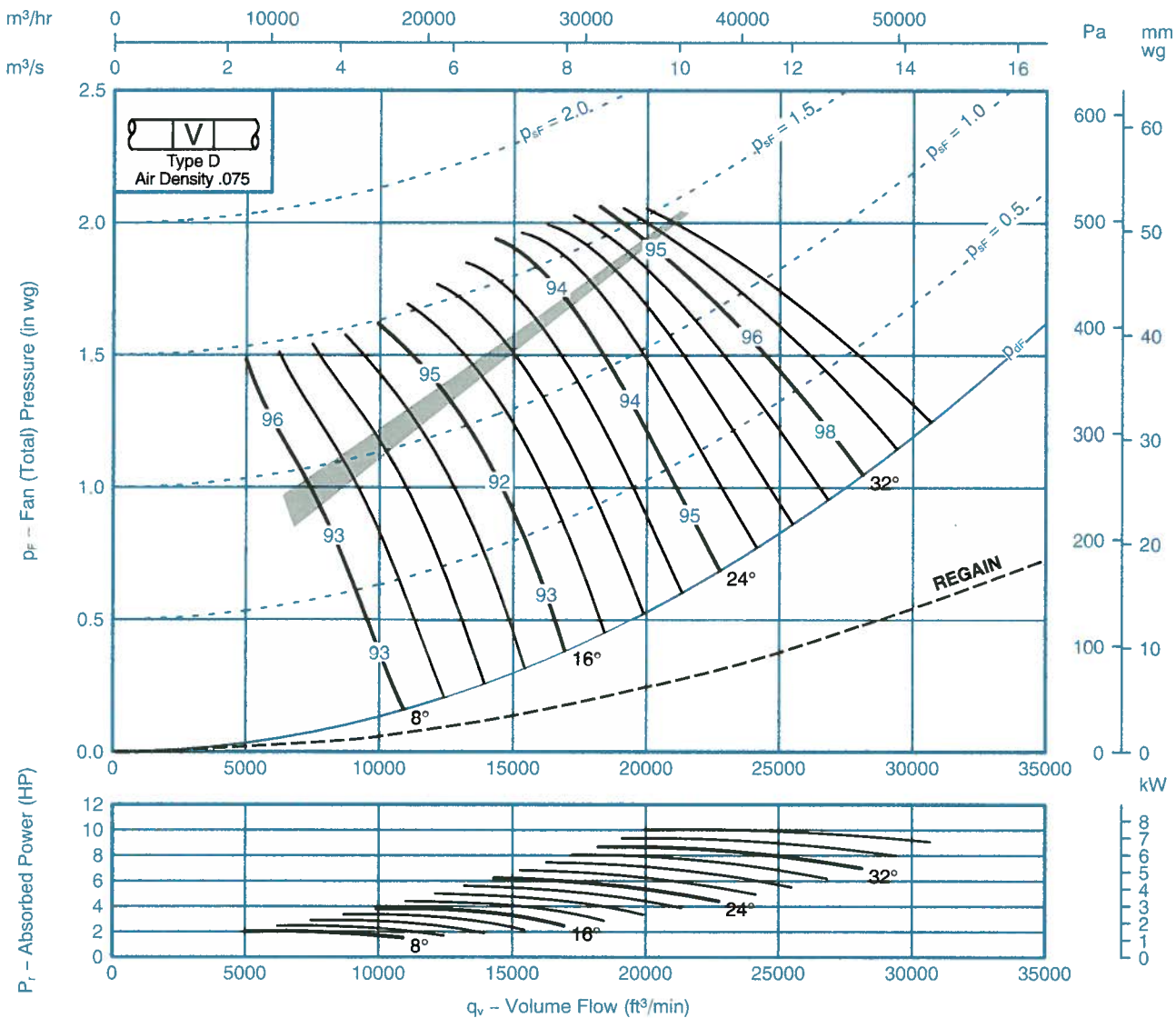
Fan Code: 90JM/25/6/9/...
 900 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-16	-12	-11	-5	-5	-11	-19	-26
	-14	-11	-10	-8	-6	-7	-13	-20
16°	-12	-12	-8	-5	-7	-12	-17	-24
	-9	-9	-7	-8	-8	-11	-16	-21
24-36°	-8	-9	-8	-8	-8	-11	-14	-19
	-6	-8	-7	-8	-9	-12	-16	-20

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-14	-10	-10	-4	-5	-10	-17	-23
	-13	-9	-10	-7	-5	-6	-12	-18
16°	-10	-12	-8	-4	-6	-11	-16	-21
	-8	-8	-7	-7	-7	-10	-14	-19
24-36°	-6	-9	-8	-7	-7	-10	-14	-17
	-6	-7	-7	-8	-9	-12	-15	-18

SK10334

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-2	0	0	0	0	0	0



JM AEROFOIL

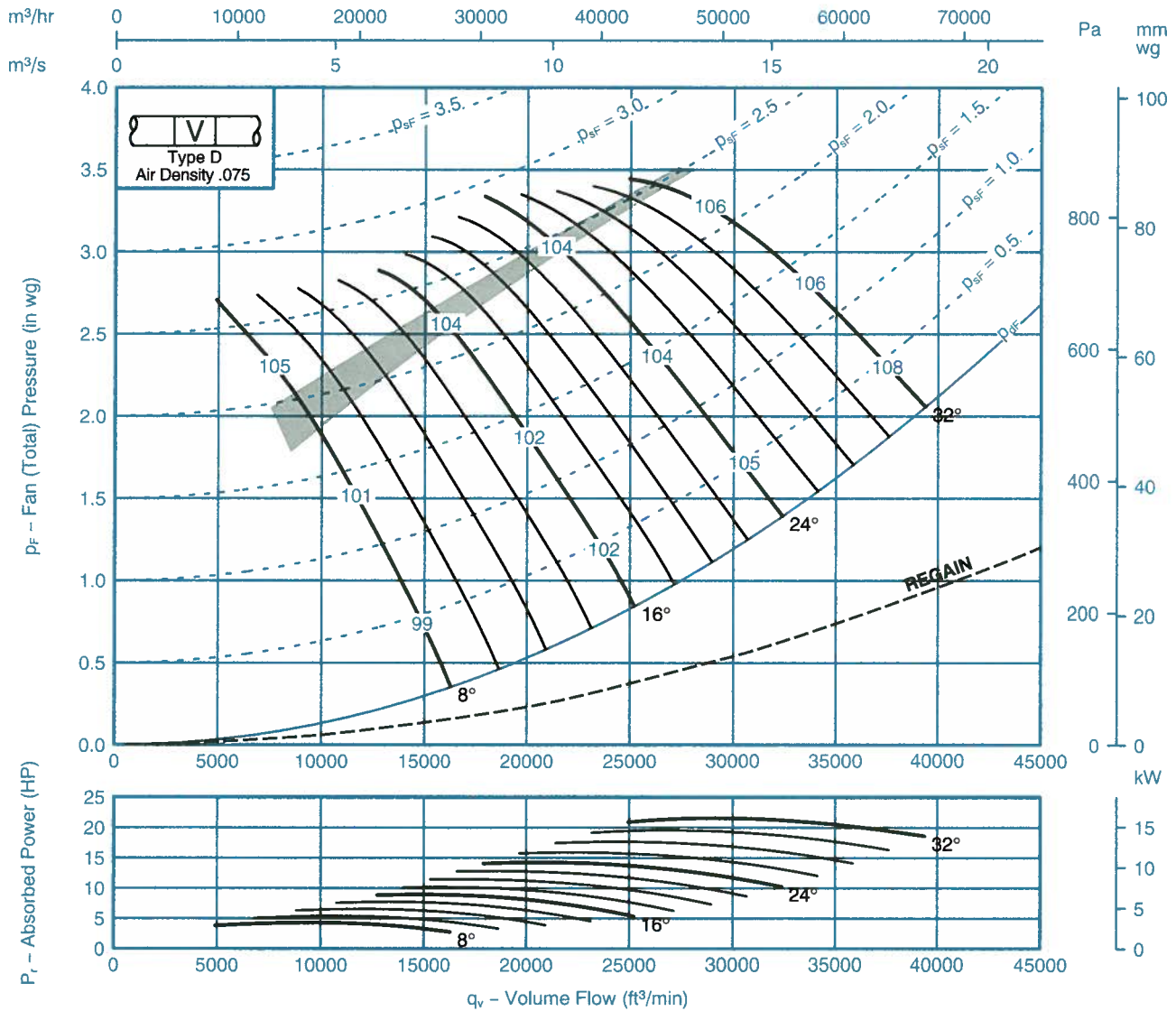
Fan Code: 90JM/25/4/6/...
 900 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-14	-16	-13	-6	-4	-9	-16	-22
	Lower	-10	-12	-12	-11	-7	-7	-11	-17
16°	Upper	-10	-12	-11	-8	-4	-9	-15	-21
	Lower	-7	-8	-8	-10	-10	-11	-14	-19
24-32°	Upper	-7	-8	-9	-8	-8	-10	-14	-18
	Lower	-6	-7	-9	-9	-10	-12	-15	-18

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-13	-14	-12	-6	-4	-9	-15	-19
	Lower	-9	-10	-12	-10	-6	-5	-10	-15
16°	Upper	-9	-12	-11	-7	-4	-9	-14	-18
	Lower	-6	-7	-8	-9	-9	-10	-13	-16
24-32°	Upper	-5	-8	-9	-8	-8	-10	-14	-16
	Lower	-5	-6	-9	-9	-10	-11	-14	-16

SK10706

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-2	0	0	0	0	0	0



JM AEROFOIL

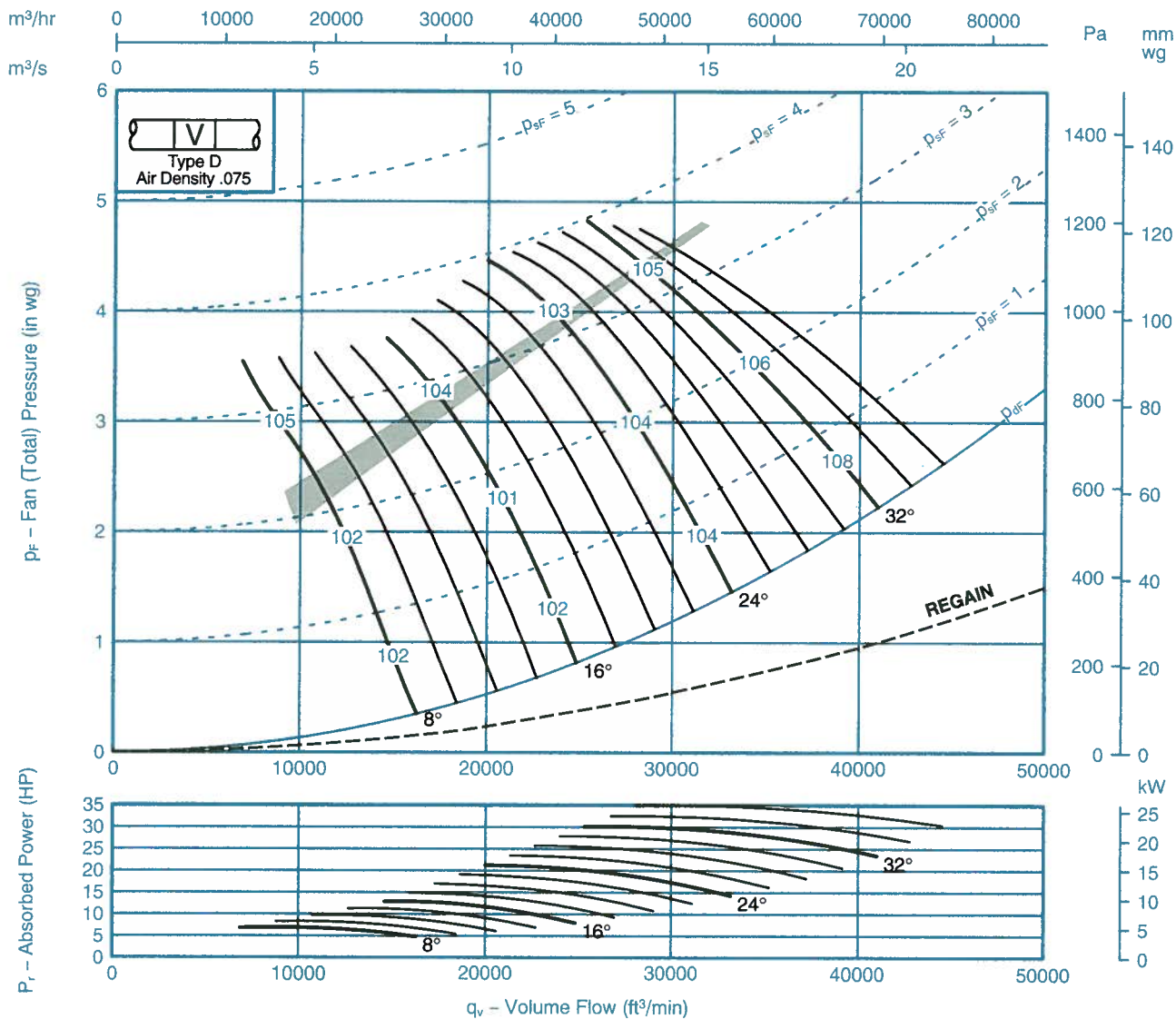
Fan Code: 90JM/31/4/9/...
 900 mm 1770 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-15	-16	-12	-8	-5	-7	-14	-22	
	-14	-14	-10	-9	-7	-6	-9	-16	
16°	-11	-13	-11	-7	-6	-9	-14	-20	
	-8	-11	-8	-7	-8	-9	-13	-18	
24-36°	-6	-10	-10	-9	-8	-10	-13	-17	
	-6	-9	-8	-8	-9	-11	-14	-18	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-14	-15	-10	-9	-4	-6	-12	-19	
	-13	-14	-9	-10	-7	-5	-8	-15	
16°	-9	-13	-10	-7	-5	-8	-13	-18	
	-8	-10	-8	-8	-7	-9	-12	-16	
24-36°	-5	-10	-9	-9	-8	-10	-12	-15	
	-5	-8	-7	-9	-9	-11	-13	-16	

SK10336

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-6	-2	0	0	0	0	0	0



JM AEROFOIL

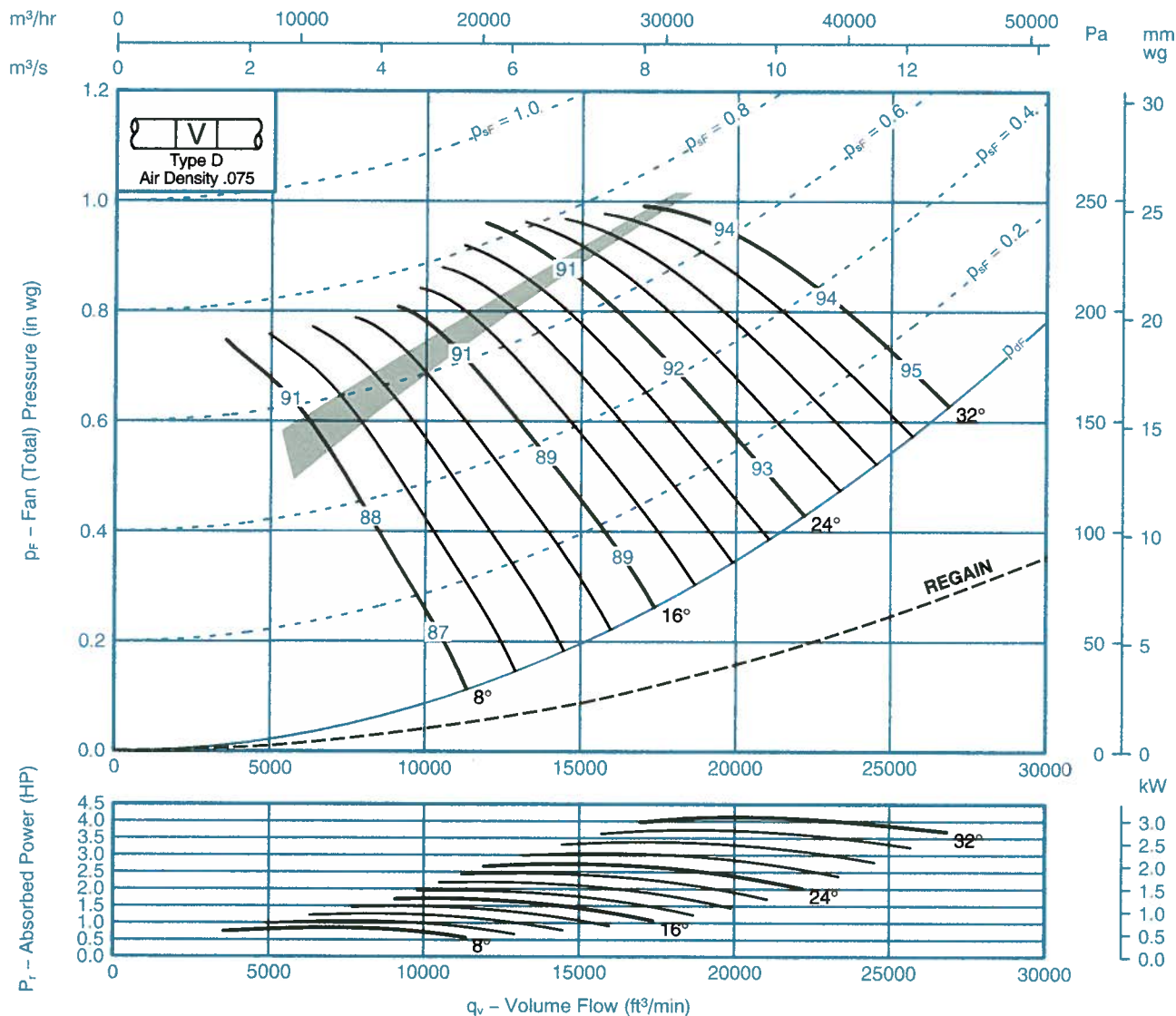
Fan Code: 100JM/25/8/6/...
 1000 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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.

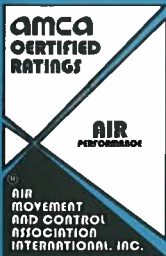
Sound Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-16	-12	-6	-4	-7	-14	-19	-27	
	-10	-10	-11	-7	-5	-8	-14	-21	
16°	-14	-13	-7	-3	-7	-14	-19	-26	
	-7	-9	-8	-6	-8	-11	-16	-23	
24-32°	-8	-8	-7	-7	-9	-13	-17	-23	
	-5	-8	-8	-9	-9	-13	-16	-22	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-14	-12	-6	-4	-7	-13	-19	-25	
	-9	-10	-11	-7	-5	-7	-14	-20	
16°	-13	-13	-7	-3	-7	-14	-18	-25	
	-6	-9	-8	-6	-8	-11	-15	-22	
24-32°	-6	-8	-7	-7	-9	-13	-16	-21	
	-4	-8	-8	-9	-9	-13	-15	-20	

SK10337

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

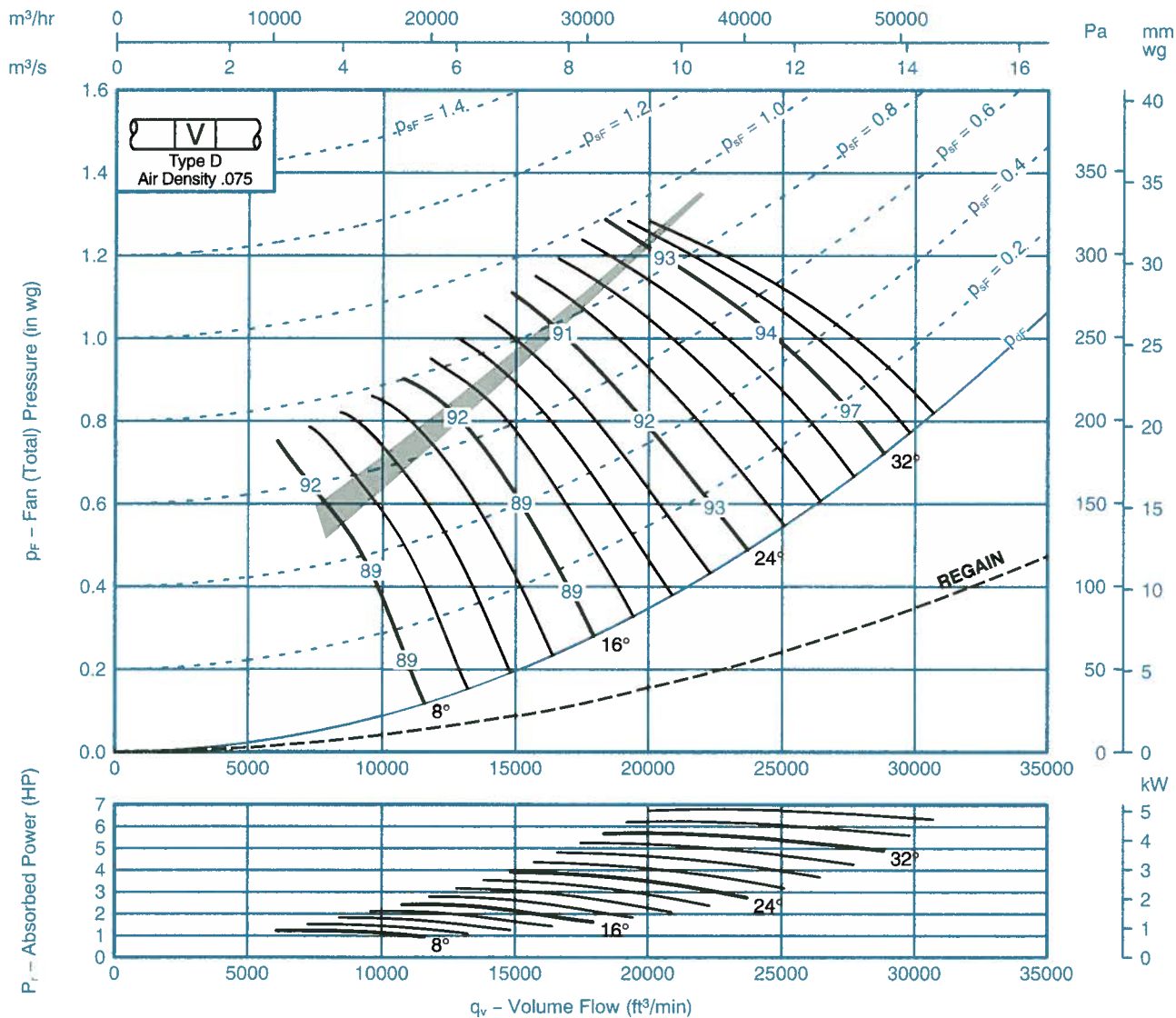
Fan Code: 100JM/25/8/9/...
 1000 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-20	-15	-9	-4	-5	-11	-18	-26
	-17	-10	-10	-6	-4	-8	-14	-20
16°	-16	-12	-7	-4	-6	-11	-18	-26
	-10	-8	-8	-6	-7	-11	-16	-22
24-36°	-8	-8	-8	-7	-7	-11	-15	-21
	-6	-7	-8	-9	-9	-12	-16	-22

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-19	-13	-9	-4	-5	-11	-17	-24
	-17	-9	-10	-6	-4	-7	-14	-19
16°	-14	-12	-7	-4	-6	-11	-17	-24
	-10	-7	-8	-6	-7	-11	-15	-21
24-36°	-7	-8	-7	-7	-7	-11	-14	-19
	-5	-6	-8	-9	-9	-12	-15	-20

SK10338

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

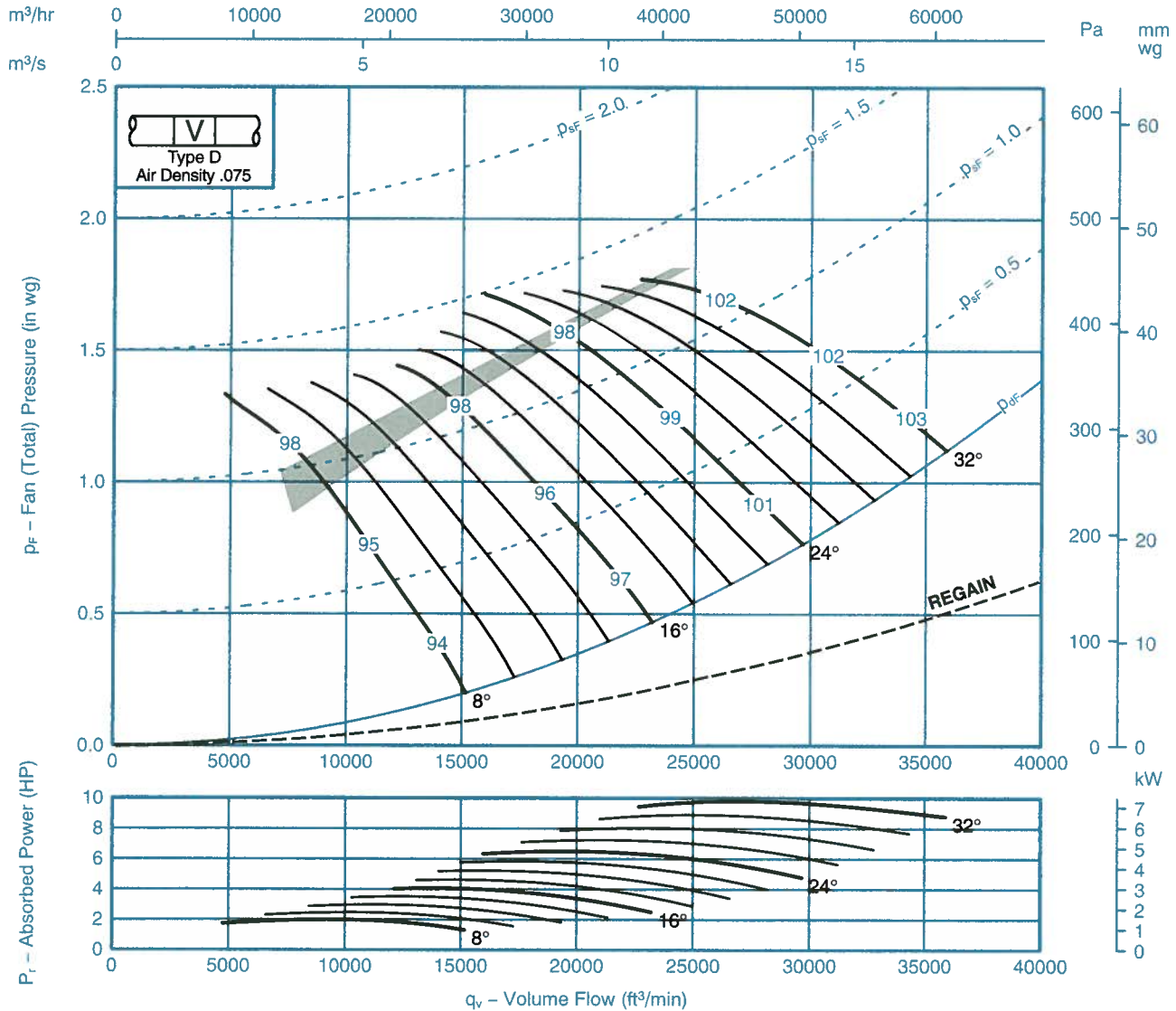
Fan Code: 100JM/25/6/6/...
 1000 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-13	-16	-8	-5	-5	-12	-17	-24	
	-7	-13	-10	-12	-6	-8	-13	-20	
16°	-11	-16	-10	-5	-5	-11	-18	-23	
	-5	-11	-10	-9	-8	-11	-16	-21	
24-32°	-6	-9	-8	-7	-8	-11	-16	-20	
	-4	-8	-9	-10	-10	-12	-16	-20	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-12	-14	-8	-5	-5	-11	-16	-21	
	-6	-12	-10	-12	-5	-6	-12	-18	
16°	-9	-16	-10	-5	-5	-11	-17	-22	
	-4	-10	-9	-9	-8	-10	-15	-20	
24-32°	-5	-9	-7	-7	-8	-11	-15	-19	
	-3	-8	-9	-10	-10	-12	-15	-19	

SK10339

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

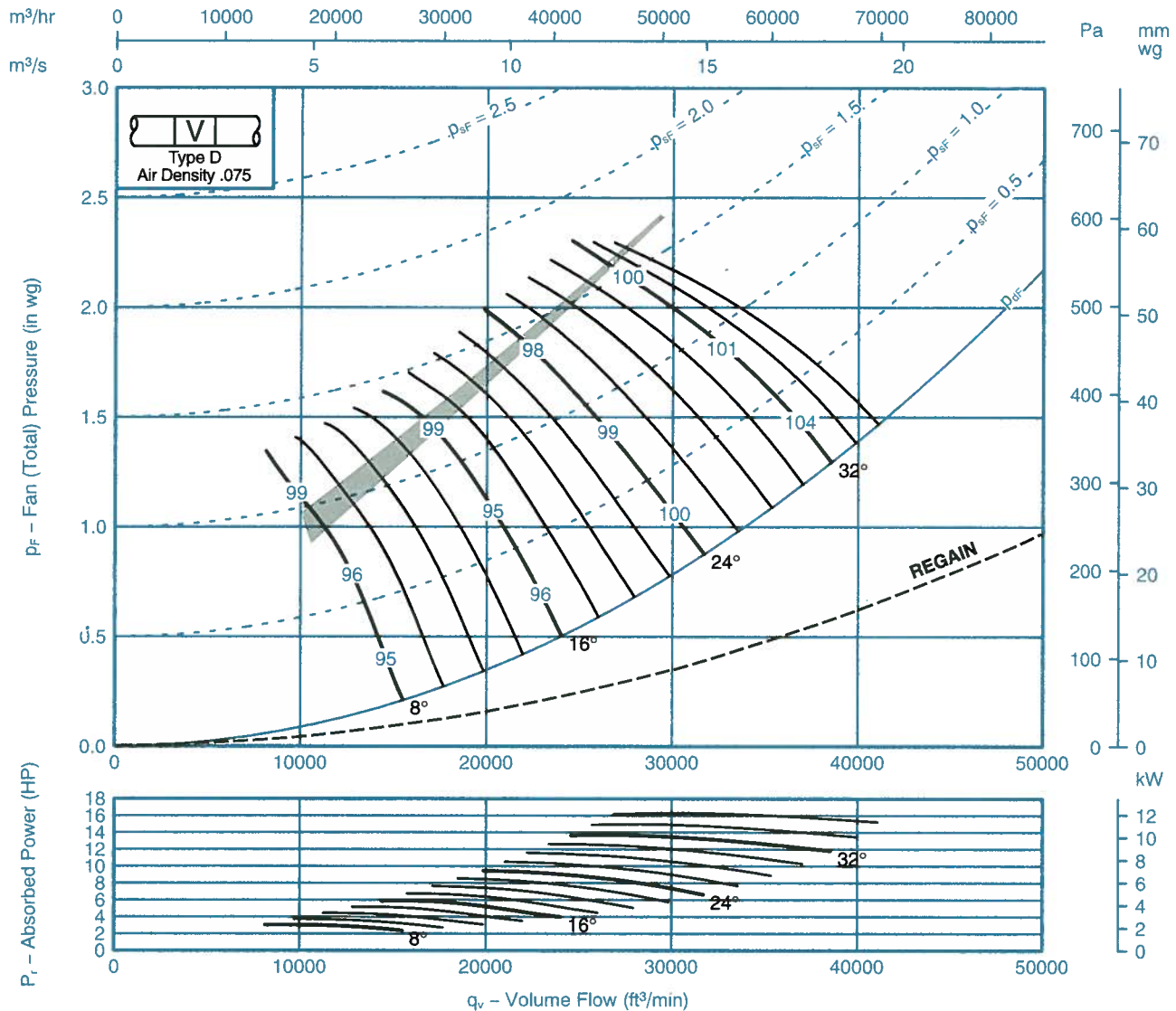
Fan Code: 100JM/25/6/9/...
 1000 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-21	-16	-12	-5	-4	-8	-15	-23
	-17	-11	-12	-9	-4	-6	-12	-18
16°	-15	-14	-12	-4	-5	-9	-15	-22
	-10	-9	-9	-7	-7	-9	-14	-20
24-36°	-7	-9	-9	-8	-7	-9	-14	-18
	-5	-7	-8	-9	-9	-11	-15	-19

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-19	-13	-12	-5	-4	-8	-15	-20
	-17	-10	-12	-9	-4	-5	-11	-16
16°	-13	-14	-12	-4	-5	-9	-15	-21
	-9	-8	-9	-7	-6	-9	-13	-18
24-36°	-6	-9	-8	-8	-7	-9	-13	-17
	-5	-7	-8	-9	-9	-11	-14	-18

SK10340

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

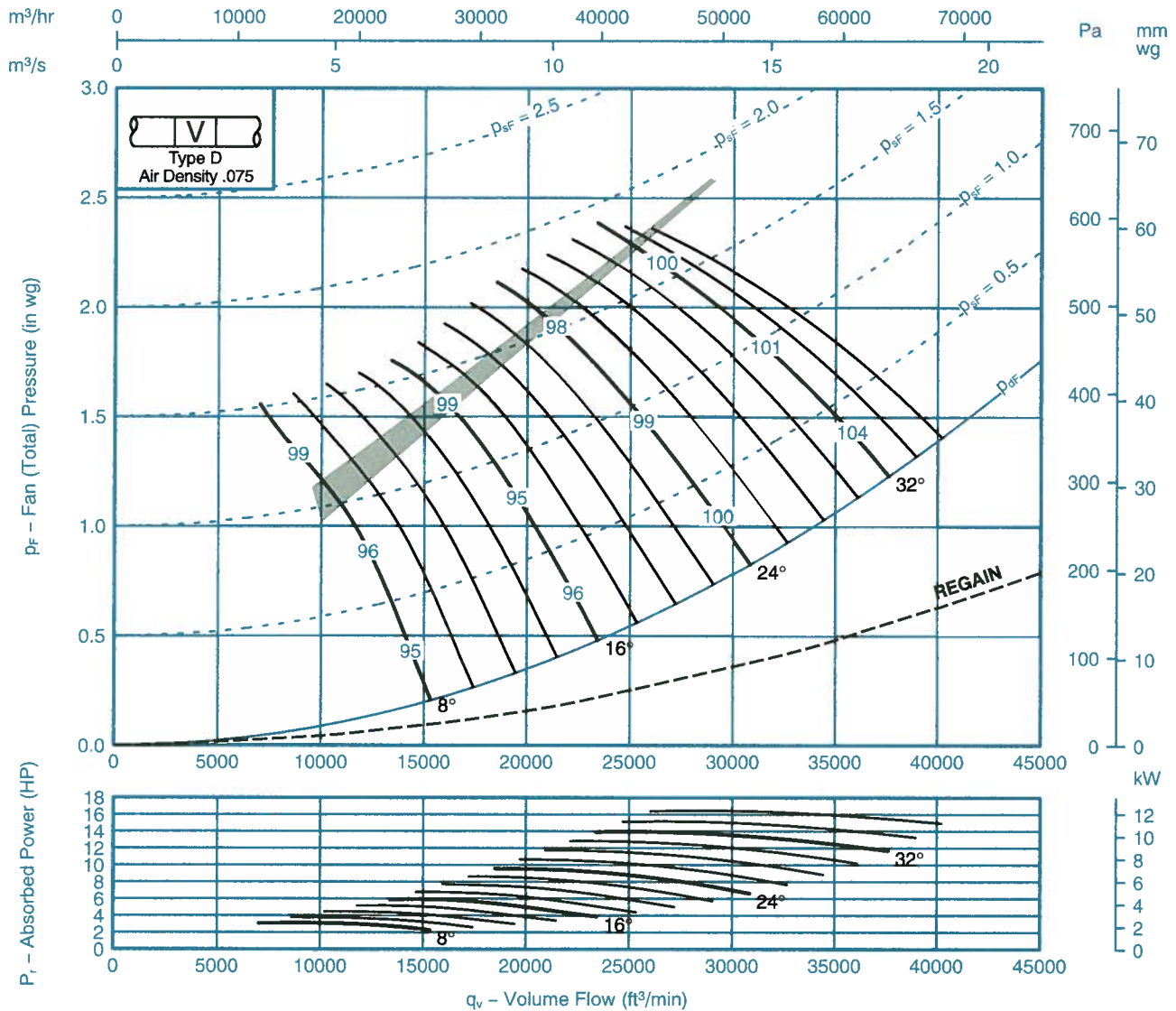
Fan Code: 100JM/31/6/9/...
 1000 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-20	-15	-12	-5	-4	-8	-15	-22
	-17	-11	-11	-8	-4	-6	-12	-17
16°	-15	-13	-11	-4	-5	-9	-15	-22
	-9	-8	-9	-7	-6	-9	-14	-19
24-36°	-8	-9	-9	-8	-8	-10	-14	-17
	-6	-7	-8	-9	-9	-11	-15	-19

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-19	-13	-12	-5	-4	-8	-14	-20
	-17	-10	-11	-8	-4	-5	-11	-16
16°	-13	-13	-11	-4	-5	-9	-14	-20
	-9	-8	-9	-7	-6	-9	-13	-18
24-36°	-6	-8	-8	-8	-8	-10	-13	-16
	-5	-7	-8	-9	-9	-11	-14	-17

SK10341

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

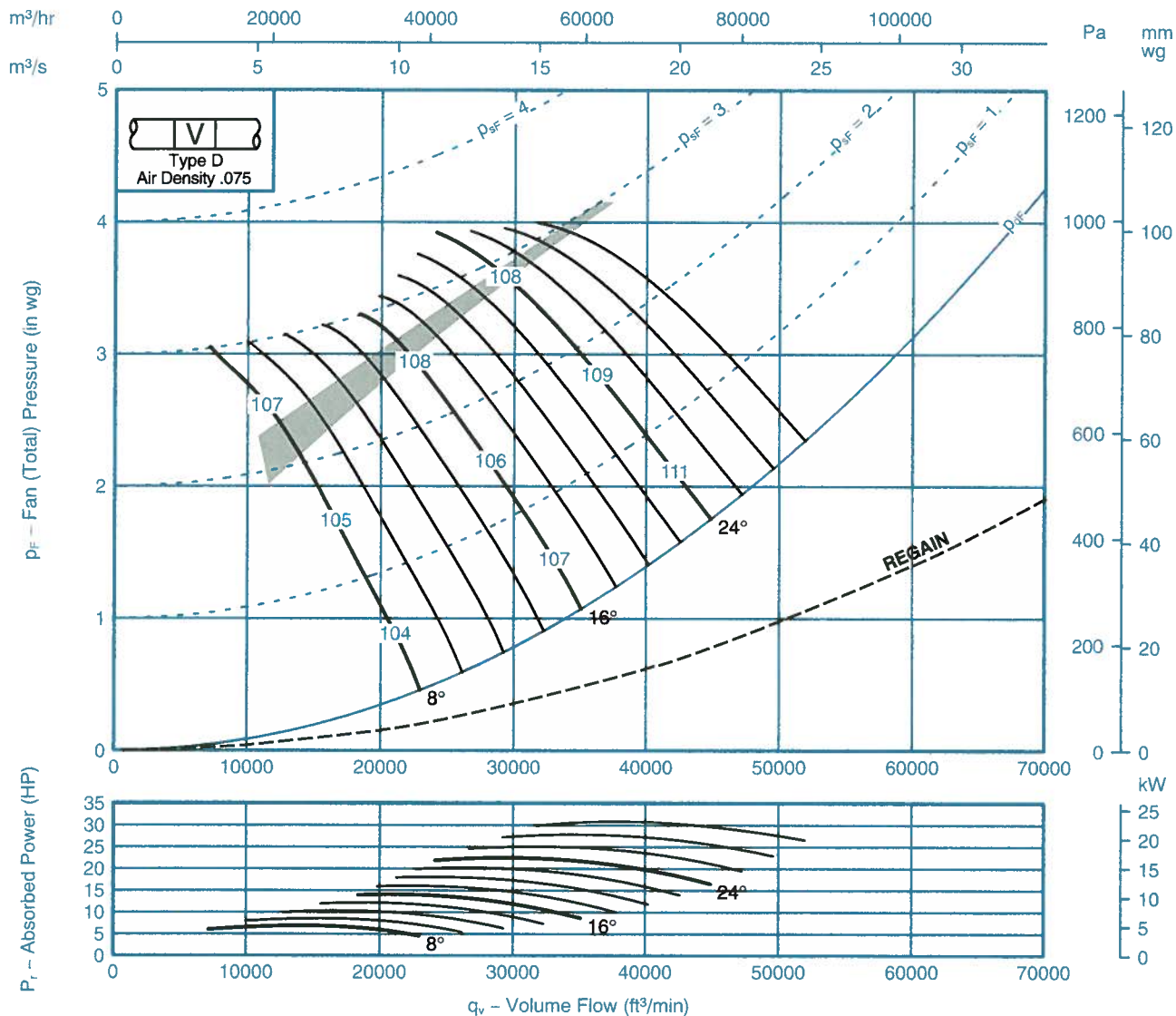
Fan Code: 100JM/25/4/6/...
 1000 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-17	-13	-6	-4	-8	-14	-20
	-6	-12	-12	-13	-9	-7	-10	-16
16°	-9	-15	-14	-7	-4	-8	-14	-20
	-4	-9	-11	-11	-9	-10	-14	-18
24-30°	-7	-9	-9	-7	-8	-9	-13	-18
	-5	-7	-10	-10	-11	-11	-15	-18

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-11	-15	-13	-6	-4	-7	-13	-17
	-6	-11	-12	-12	-9	-5	-9	-14
16°	-8	-15	-14	-7	-4	-8	-13	-18
	-4	-9	-11	-10	-9	-9	-13	-17
24-30°	-6	-8	-9	-7	-8	-9	-13	-16
	-4	-6	-9	-10	-11	-11	-13	-16

SK10710

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

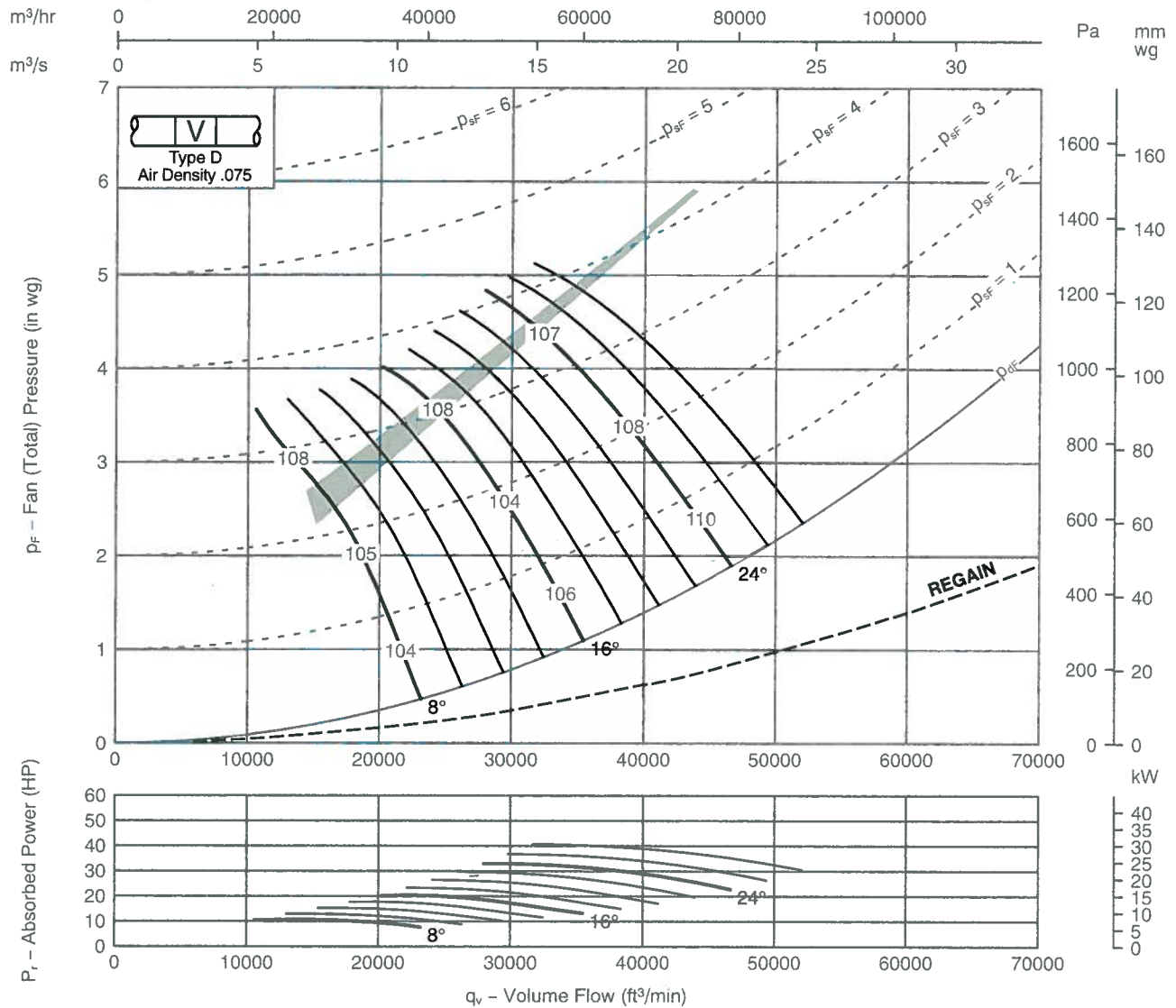
Fan Code: 100JM/31/4/9/...
 1000 mm 1770 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-21	-21	-15	-10	-4	-5	-11	-18
	-17	-18	-11	-10	-7	-4	-8	-14
16°	-15	-16	-12	-8	-4	-6	-11	-18
	-10	-11	-8	-8	-7	-8	-12	-16
24-28°	-8	-9	-9	-8	-8	-8	-12	-16
	-7	-7	-8	-9	-10	-10	-13	-17

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-20	-20	-13	-9	-4	-5	-10	-16
	-17	-18	-9	-10	-7	-3	-8	-13
16°	-14	-16	-12	-8	-4	-6	-10	-16
	-9	-11	-8	-8	-6	-7	-11	-15
24-28°	-7	-9	-9	-8	-8	-8	-11	-14
	-6	-7	-7	-9	-10	-10	-12	-15

SK10342

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

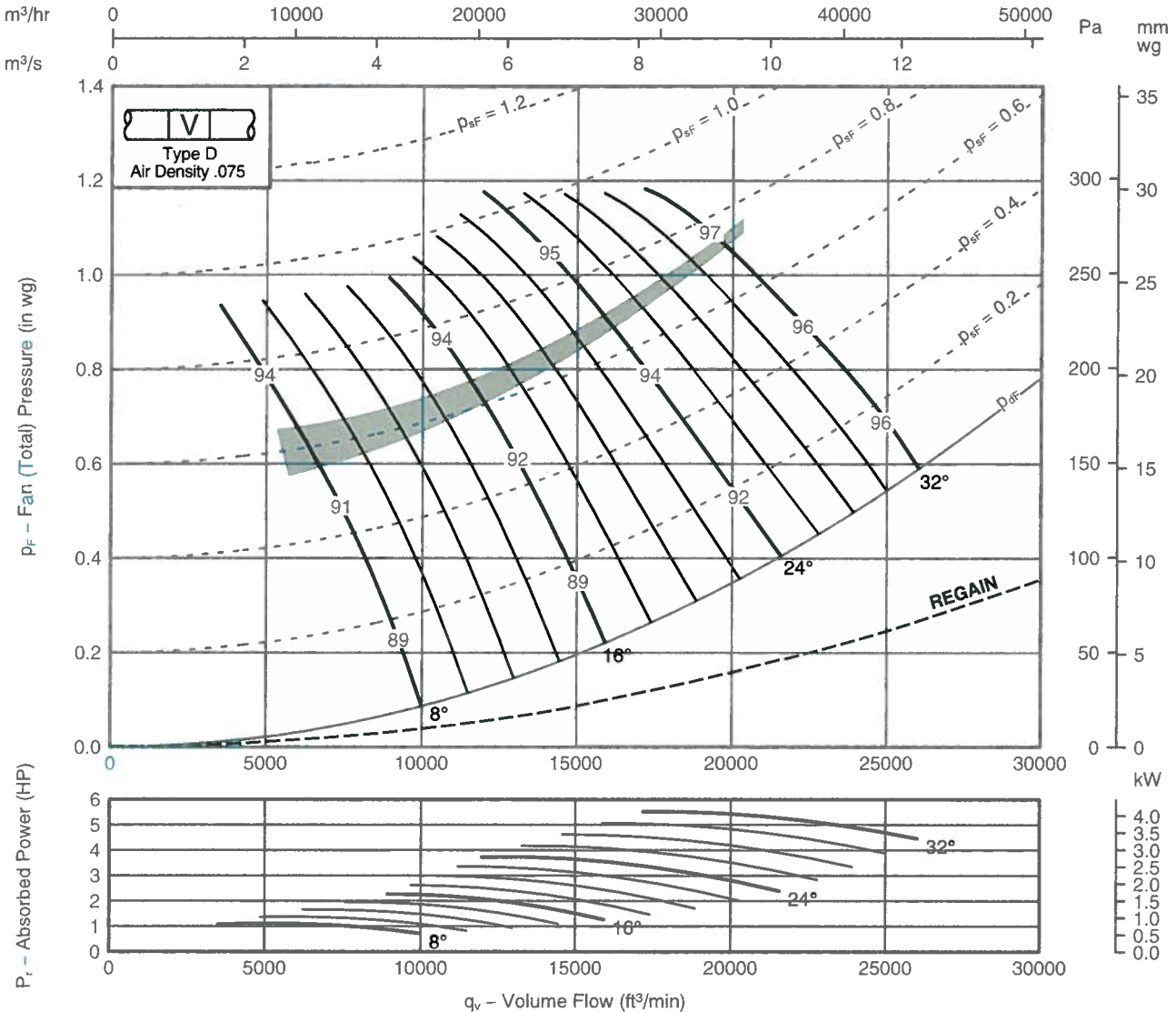
Fan Code: 100JM/40/8/6/...
 1000 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°		-7	-12	-5	-6	-10	-18	-23	-32
		-3	-10	-9	-9	-11	-14	-20	-28
16°		-3	-10	-8	-10	-13	-17	-21	-30
		-3	-9	-8	-12	-13	-17	-21	-30
24-32°		-3	-9	-8	-12	-12	-15	-19	-24
		-4	-8	-7	-11	-12	-16	-21	-24

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°		-4	-11	-5	-5	-10	-18	-24	-31
		0	-9	-9	-9	-11	-14	-20	-27
16°		0	-9	-8	-10	-13	-17	-21	-28
		-0	-8	-9	-12	-13	-16	-22	-29
24-32°		0	-9	-9	-12	-12	-14	-18	-23
		-1	-7	-8	-11	-12	-16	-21	-23

SK11496

End Reflection Correction (dB)								
63	125	250	500	1k	2k	4k	8k	
-5	-2	0	0	0	0	0	0	0



JM AEROFOIL

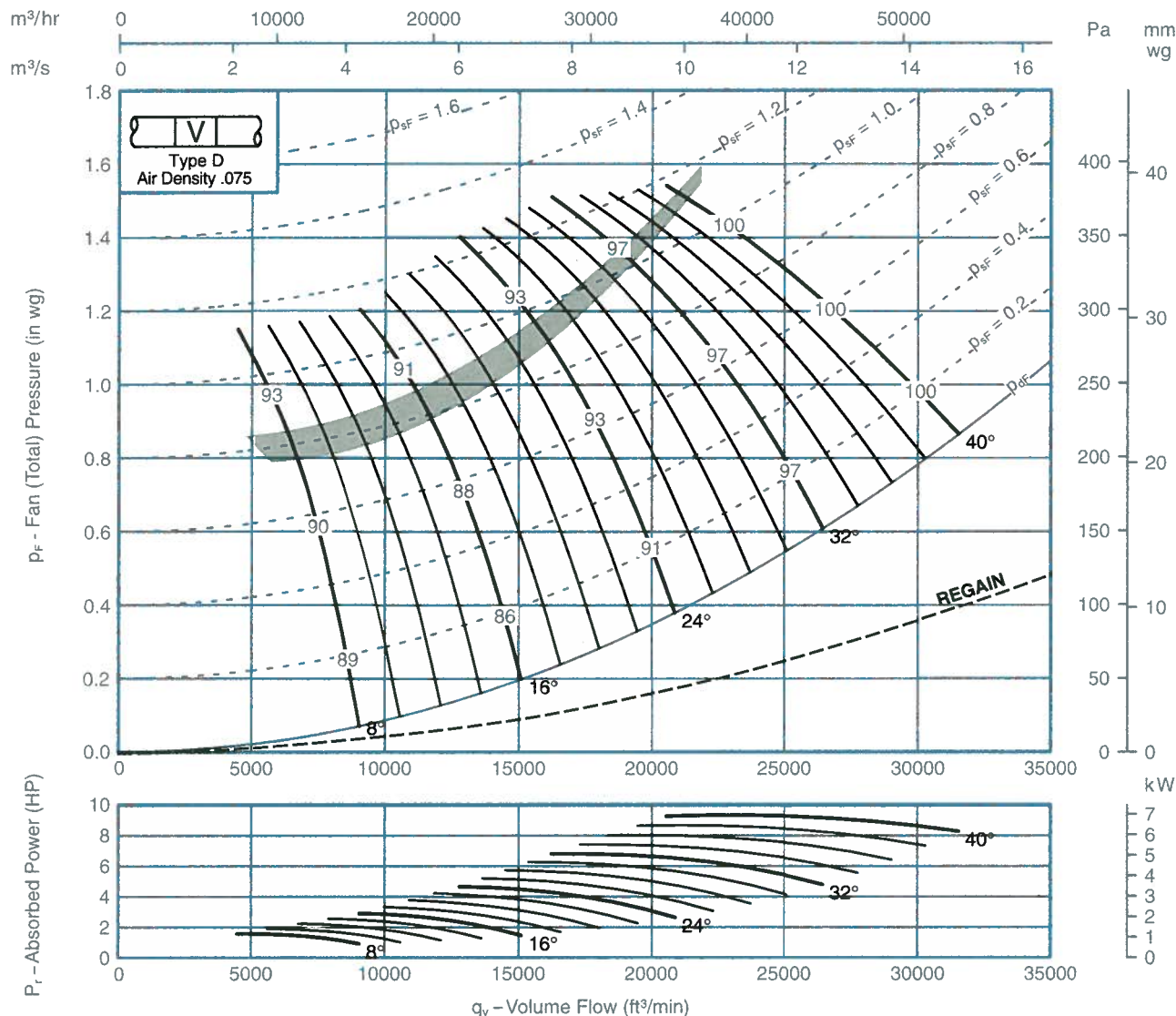
Fan Code: 100JM/40/8/9/...
 1000 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-9	-7	-4	-7	-11	-18	-24	-32
	Lower	-11	-6	-7	-7	-7	-12	-19	-28
16°	Upper	-9	-9	-5	-6	-9	-13	-20	-28
	Lower	-8	-6	-7	-10	-9	-13	-18	-25
24-40°	Upper	-5	-8	-5	-13	-13	-15	-17	-23
	Lower	-6	-6	-5	-13	-15	-16	-19	-26

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-7	-4	-4	-6	-11	-17	-23	-30
	Lower	-7	-3	-7	-7	-8	-12	-18	-27
16°	Upper	-4	-7	-4	-6	-11	-14	-19	-27
	Lower	-2	-3	-6	-9	-10	-11	-17	-24
24-40°	Upper	-2	-5	-3	-12	-13	-15	-16	-22
	Lower	-2	-3	-3	-12	-14	-16	-18	-25

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0

SK11497



JM AEROFOIL

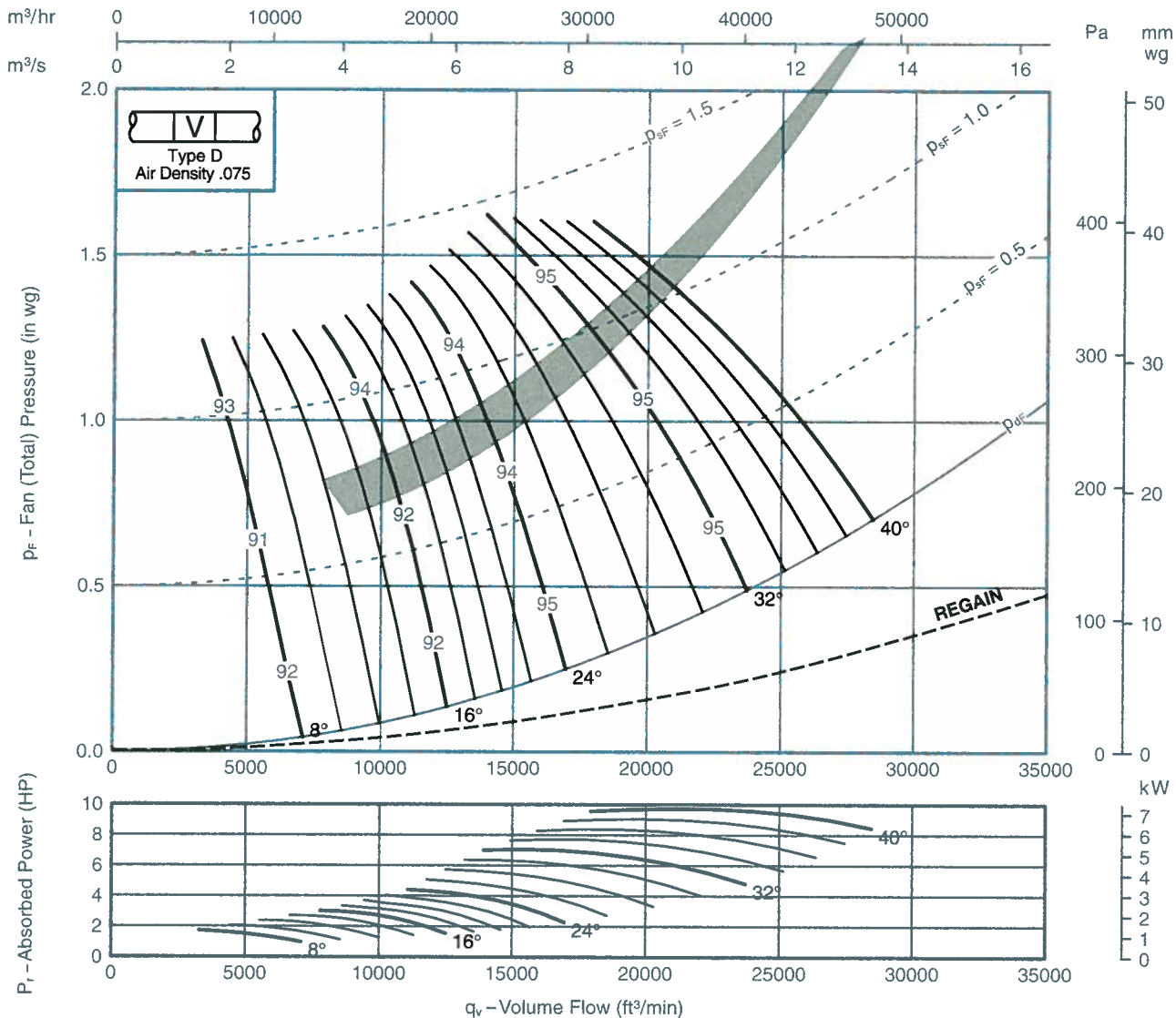
Fan Code: 100JM/50/8/12/...
 1000 mm 875 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-18	-6	-8	-4	-8	-15	-20	-28
	-17	-6	-8	-5	-8	-13	-18	-25
16°	-14	-6	-8	-6	-8	-14	-20	-27
	-12	-4	-9	-8	-9	-13	-17	-25
24-40°	-8	-5	-8	-8	-10	-14	-17	-21
	-8	-4	-8	-8	-10	-14	-17	-23

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-4	-7	-6	-8	-12	-17	-25
	-14	-3	-7	-7	-8	-11	-15	-23
16°	-11	-3	-7	-6	-8	-12	-17	-24
	-9	0	-8	-7	-9	-11	-14	-22
24-40°	-6	-3	-7	-8	-10	-11	-14	-19
	-6	-2	-7	-8	-10	-12	-14	-20

SK11498

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

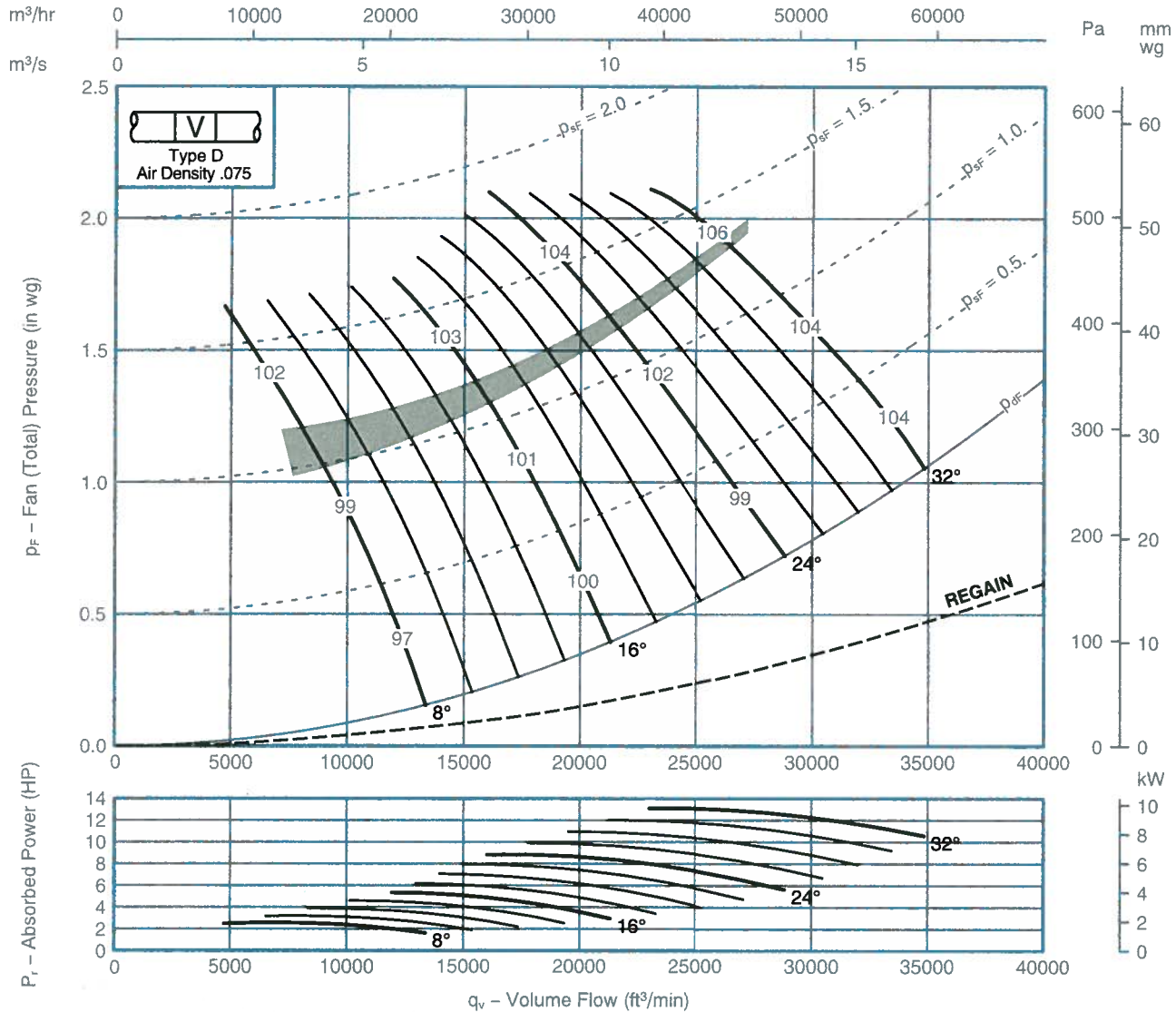
Fan Code: 100JM/40/6/6/...
 1000 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

		Inlet Levels							
		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-7	-8	-7	-6	-8	-15	-21	-30
	Lower	-6	-4	-9	-11	-10	-13	-18	-26
16°	Upper	-3	-7	-9	-10	-13	-17	-20	-28
	Lower	-3	-6	-8	-12	-14	-16	-20	-28
24-32°	Upper	-3	-7	-9	-13	-13	-15	-19	-24
	Lower	-4	-7	-7	-11	-12	-15	-21	-24

		Outlet Levels							
		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-6	-6	-7	-6	-7	-15	-22	-29
	Lower	-5	-1	-9	-11	-10	-13	-18	-25
16°	Upper	-1	-5	-8	-10	-13	-16	-20	-27
	Lower	-1	-4	-8	-12	-13	-16	-21	-27
24-32°	Upper	-1	-6	-8	-13	-13	-14	-19	-23
	Lower	-1	-6	-7	-11	-12	-15	-21	-23

SK11499

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

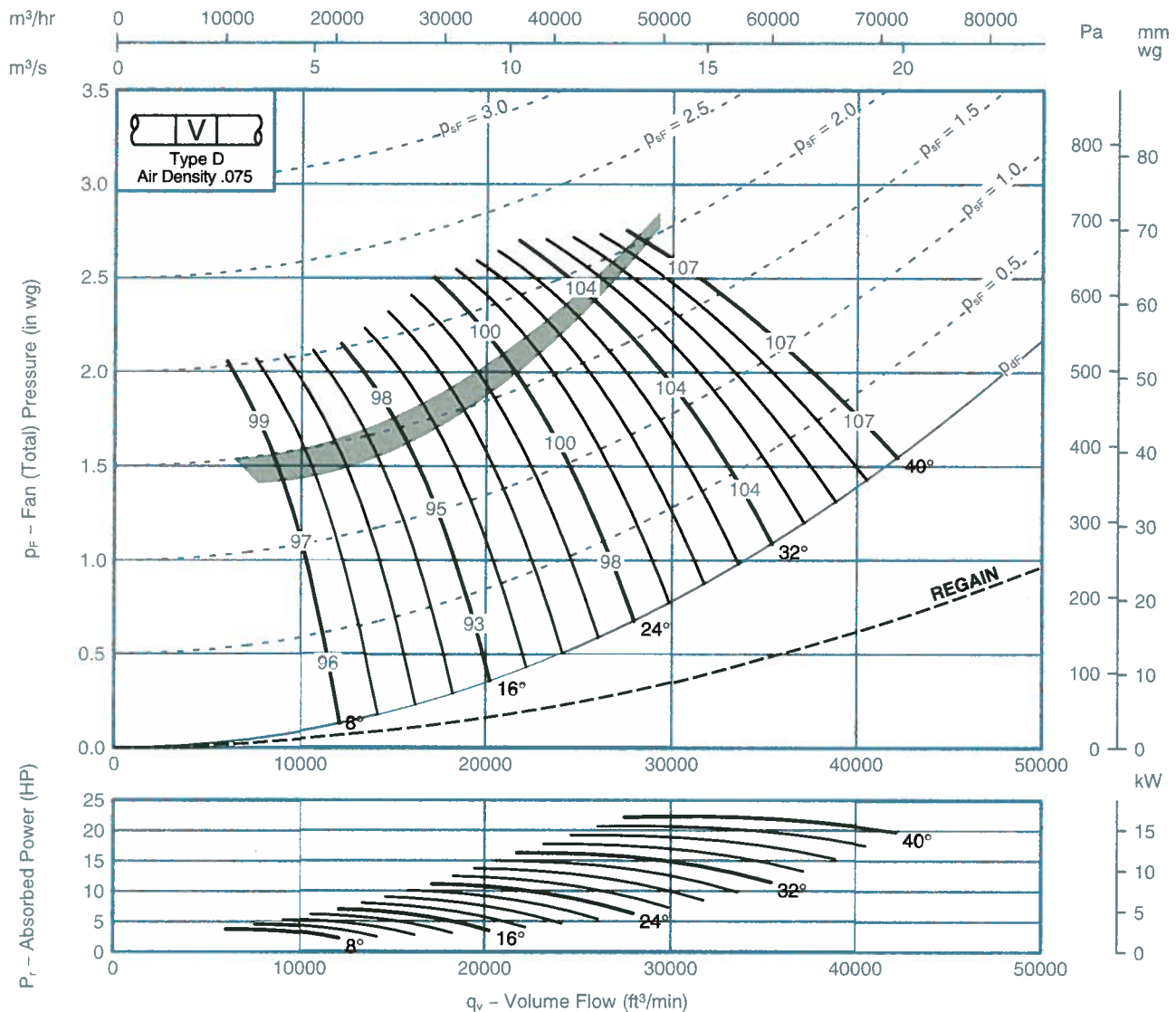
Fan Code: 100JM/40/6/9/...
 1000 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-9	-9	-5	-5	-9	-16	-20	-29
	-11	-7	-8	-8	-6	-10	-15	-26
16°	-8	-11	-7	-5	-9	-12	-17	-25
	-7	-5	-7	-8	-10	-10	-14	-24
24-40°	-5	-8	-7	-7	-14	-15	-16	-21
	-6	-6	-7	-7	-14	-17	-17	-25

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-7	-6	-5	-5	-9	-16	-19	-28
	-7	-4	-7	-7	-7	-10	-14	-24
16°	-4	-8	-6	-5	-10	-12	-16	-25
	-3	-4	-6	-7	-11	-11	-13	-22
24-40°	-2	-5	-6	-6	-13	-15	-15	-20
	-2	-3	-5	-6	-14	-16	-17	-24

SK11500

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

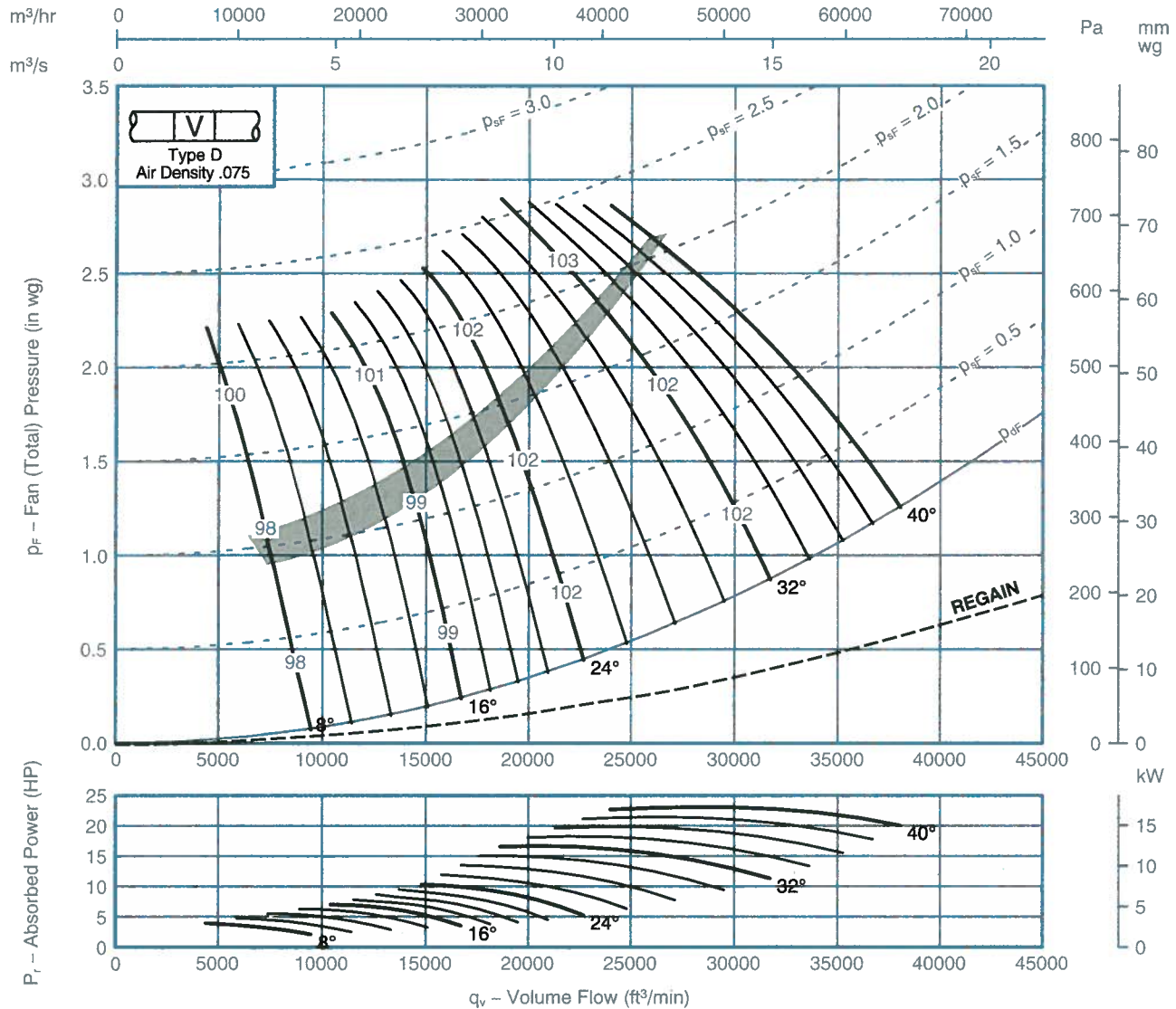
Fan Code: 100JM/50/6/12/...
 1000 mm 1170 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

		Inlet Levels							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-17	-14	-5	-6	-6	-11	-17	-24	
	-17	-14	-5	-6	-6	-11	-16	-21	
16°	-12	-13	-5	-7	-7	-11	-17	-24	
	-11	-13	-3	-9	-8	-12	-16	-21	
24-40°	-8	-9	-5	-8	-9	-13	-15	-20	
	-8	-9	-4	-9	-9	-13	-15	-20	

		Outlet Levels							
Pitch Angle	Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
8°	-14	-12	-3	-7	-6	-9	-15	-21	
	-13	-12	-3	-8	-6	-9	-13	-19	
16°	-10	-11	-3	-7	-6	-10	-14	-21	
	-9	-11	0	-8	-8	-10	-13	-19	
24-40°	-5	-7	-4	-8	-9	-11	-13	-18	
	-6	-7	-3	-9	-9	-11	-13	-18	

SK11501

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

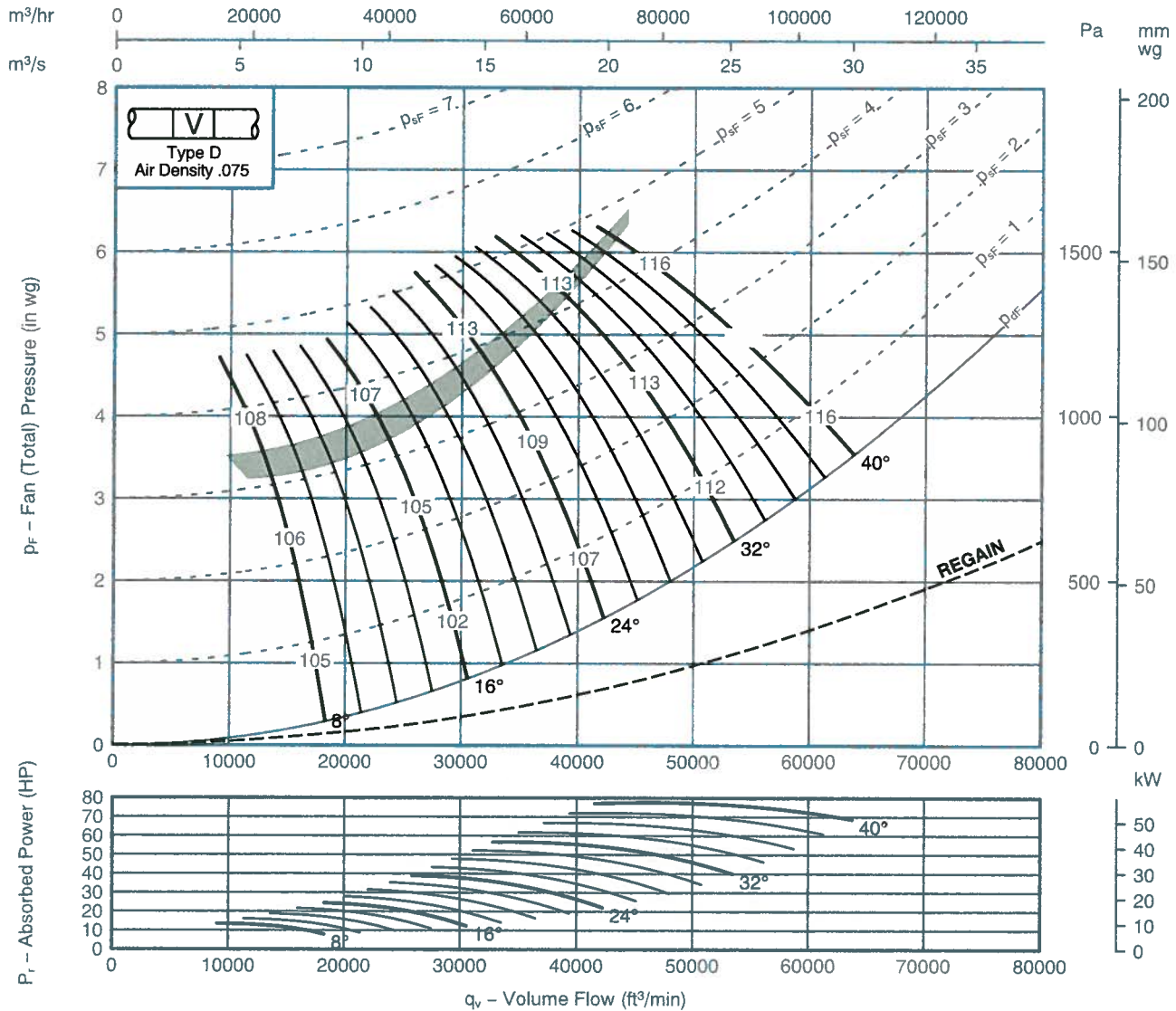
Fan Code: 100JM/40/4/9/...
 1000 mm 1770 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-11	-10	-8	-5	-7	-11	-18	-24
	-12	-11	-6	-7	-7	-7	-12	-19
16°	-10	-9	-9	-6	-7	-10	-14	-20
	-9	-8	-6	-7	-10	-10	-11	-18
24-40°	-6	-7	-9	-8	-14	-14	-16	-18
	-7	-7	-7	-6	-14	-16	-17	-20

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-9	-7	-6	-4	-8	-11	-17	-22
	-8	-8	-4	-7	-8	-7	-11	-18
16°	-6	-6	-8	-6	-8	-10	-13	-19
	-4	-5	-4	-7	-11	-10	-10	-17
24-40°	-3	-3	-7	-5	-13	-14	-16	-17
	-4	-3	-5	-5	-13	-15	-17	-19

SK11503

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

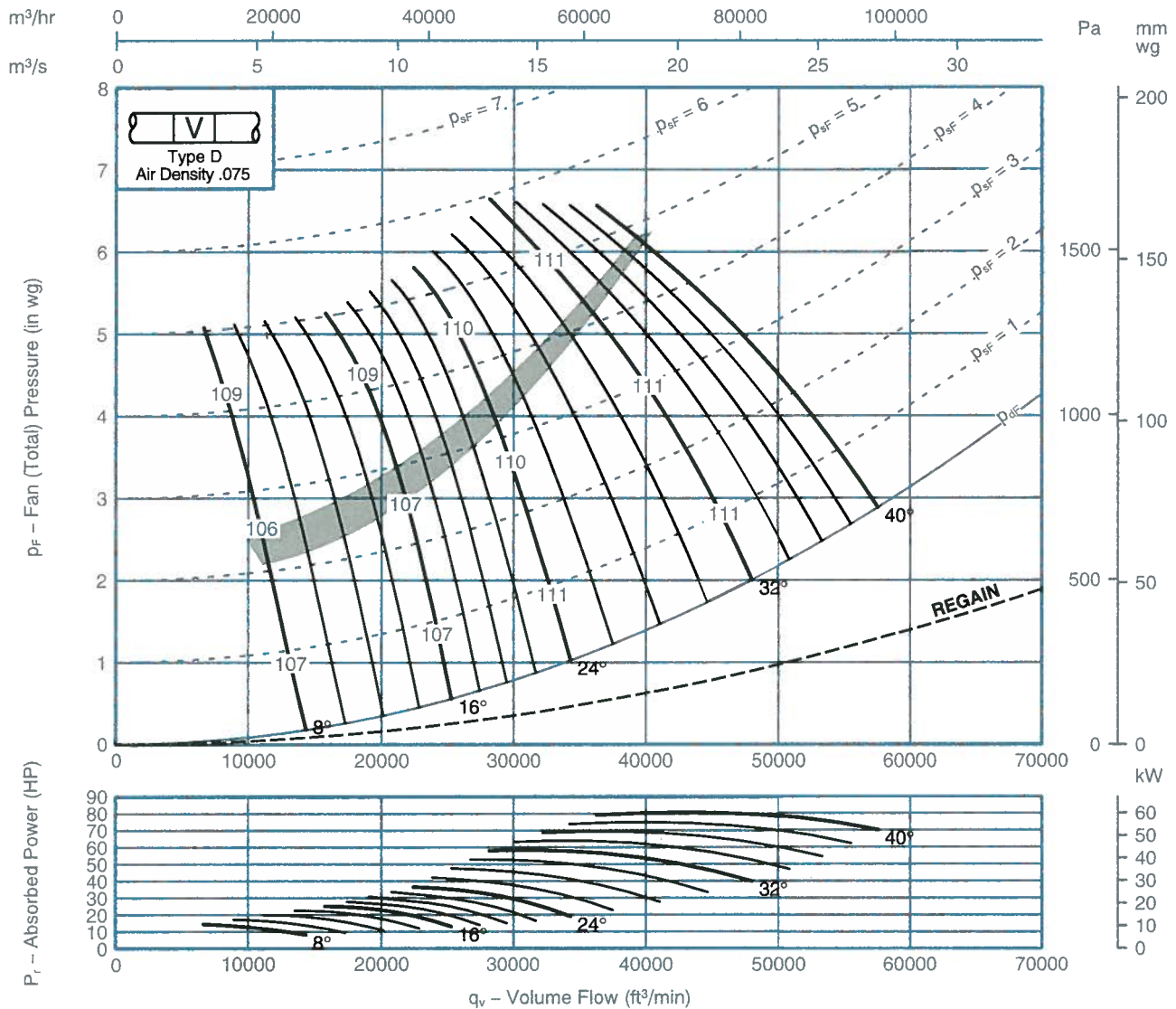
Fan Code: 100JM/50/4/12/...
 1000 mm 1770 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

		Inlet Levels							
		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-17	-18	-6	-8	-5	-9	-16	-21
	Lower	-17	-17	-5	-8	-5	-9	-14	-19
16°	Upper	-12	-15	-5	-7	-6	-9	-15	-21
	Lower	-11	-14	-3	-9	-8	-10	-14	-19
24-40°	Upper	-8	-9	-5	-9	-9	-11	-15	-18
	Lower	-8	-10	-4	-9	-9	-11	-15	-18

		Outlet Levels							
		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-14	-16	-4	-8	-4	-6	-13	-18
	Lower	-14	-15	-3	-7	-6	-7	-12	-17
16°	Upper	-10	-13	-3	-7	-6	-7	-12	-18
	Lower	-9	-12	-1	-9	-8	-9	-11	-16
24-40°	Upper	-6	-7	-4	-8	-9	-9	-12	-16
	Lower	-6	-7	-3	-9	-9	-9	-12	-16

SK11504

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

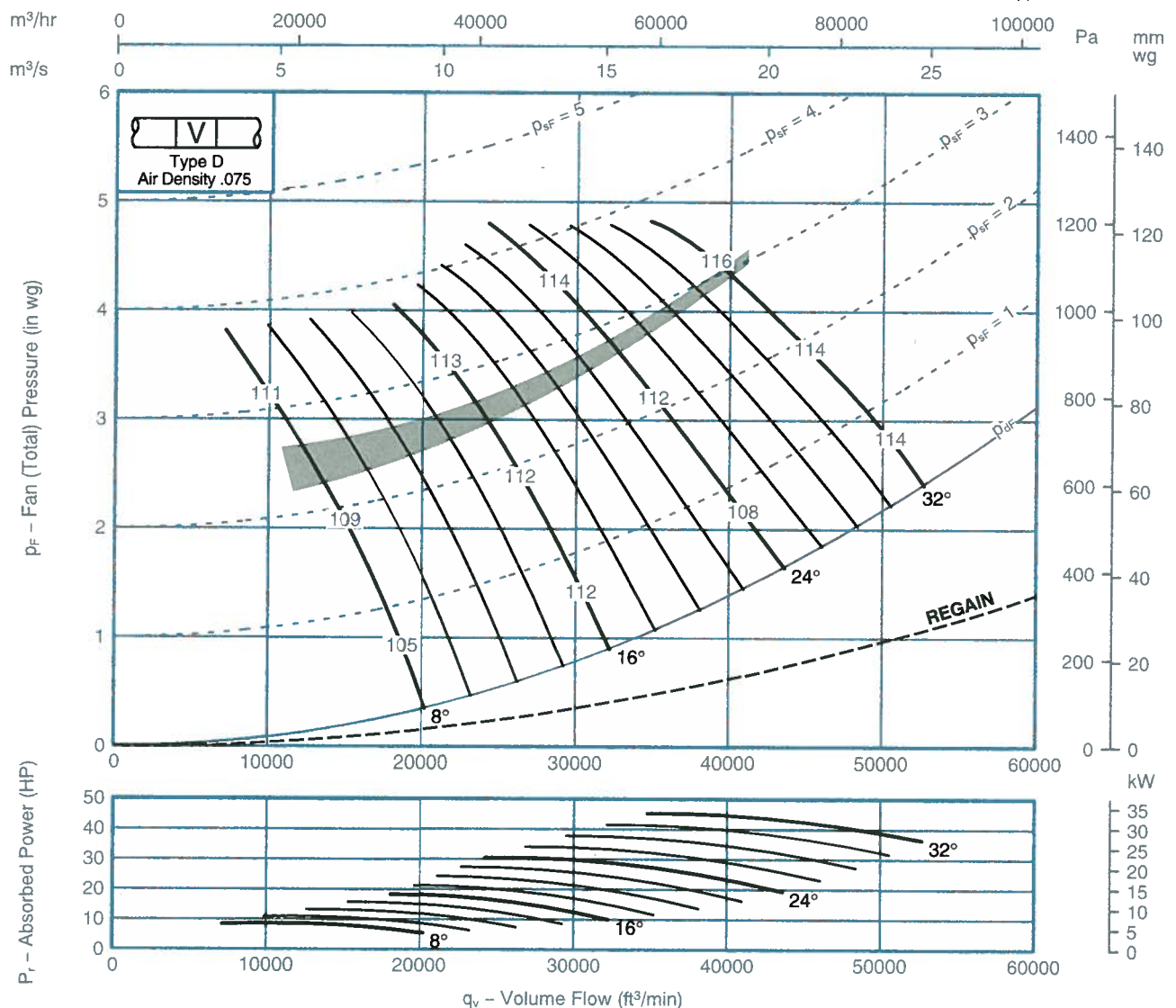
Fan Code: 100JM/40/4/6/...
 1000 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-8	-7	-13	-6	-6	-10	-19	-24	
	-7	-4	-11	-9	-10	-12	-15	-20	
16°	-4	-5	-13	-9	-12	-15	-19	-23	
	-5	-4	-11	-10	-14	-15	-18	-23	
24-32°	-4	-5	-12	-10	-15	-14	-17	-21	
	-5	-5	-10	-9	-13	-13	-18	-23	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-7	-5	-13	-6	-6	-10	-19	-23	
	-7	-1	-10	-10	-10	-12	-15	-19	
16°	-2	-3	-13	-9	-12	-15	-19	-22	
	-3	-3	-11	-10	-14	-15	-19	-22	
24-32°	-2	-3	-11	-10	-15	-14	-17	-20	
	-3	-4	-10	-9	-13	-13	-18	-22	

SK11502

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-5	-2	0	0	0	0	0	0



JM AEROFOIL

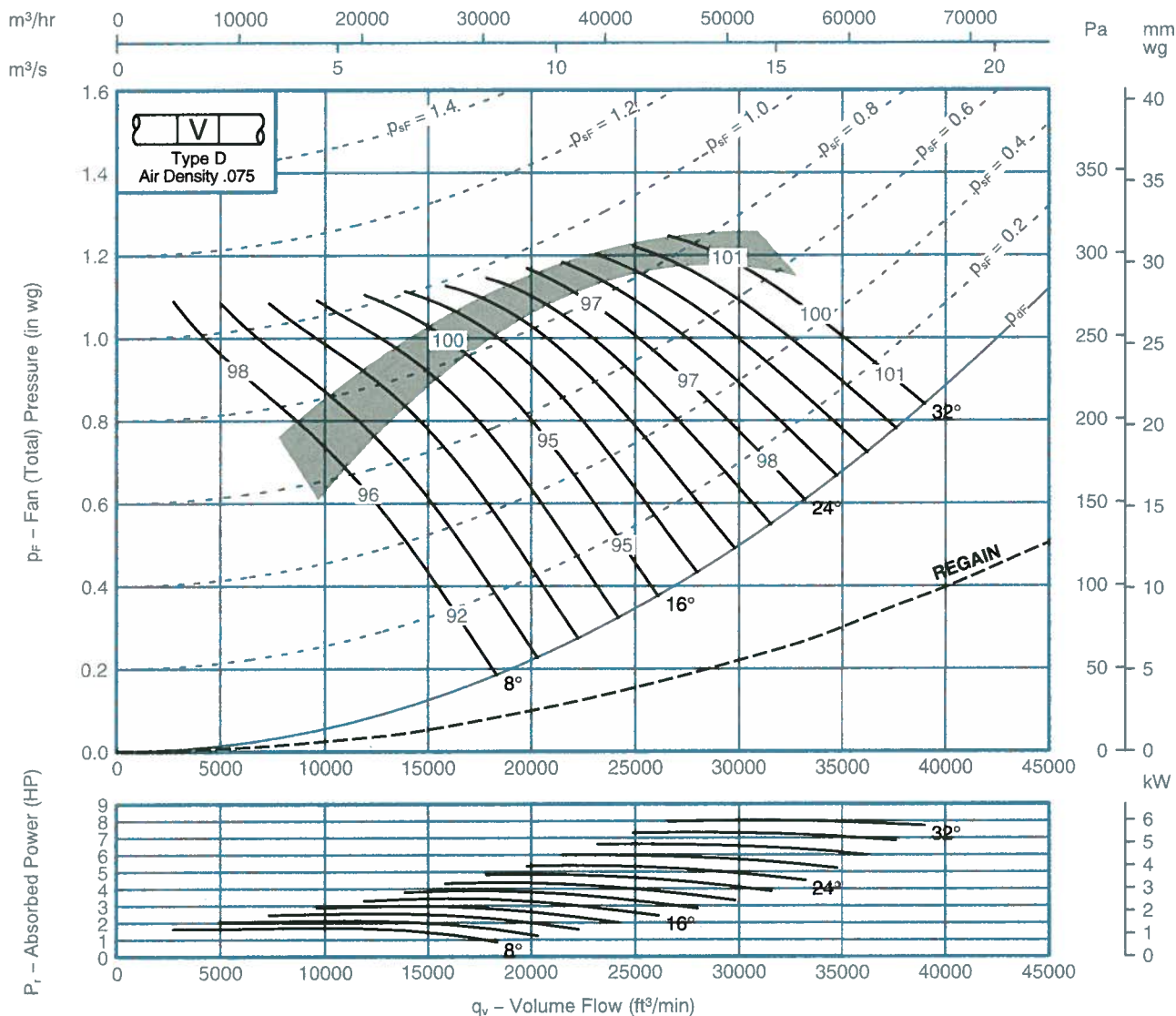
Fan Code: 112JM/31/8/6/...
 1120 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

		Inlet Levels							
		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-16	-12	-6	-4	-7	-14	-19	-26
	Lower	-10	-11	-10	-6	-5	-9	-15	-21
16°	Upper	-14	-13	-7	-3	-7	-14	-19	-26
	Lower	-7	-9	-8	-6	-8	-11	-16	-21
24-32°	Upper	-7	-8	-7	-7	-9	-12	-16	-21
	Lower	-5	-8	-8	-9	-9	-13	-16	-20

		Outlet Levels							
		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-14	-12	-6	-5	-8	-13	-19	-24
	Lower	-10	-11	-10	-7	-6	-8	-15	-20
16°	Upper	-13	-13	-7	-4	-8	-14	-18	-25
	Lower	-6	-9	-8	-7	-8	-11	-15	-20
24-32°	Upper	-6	-8	-7	-8	-9	-12	-16	-19
	Lower	-4	-8	-8	-10	-10	-13	-15	-18

SK10716

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-2	0	0	0	0	0	0



JM AEROFOIL

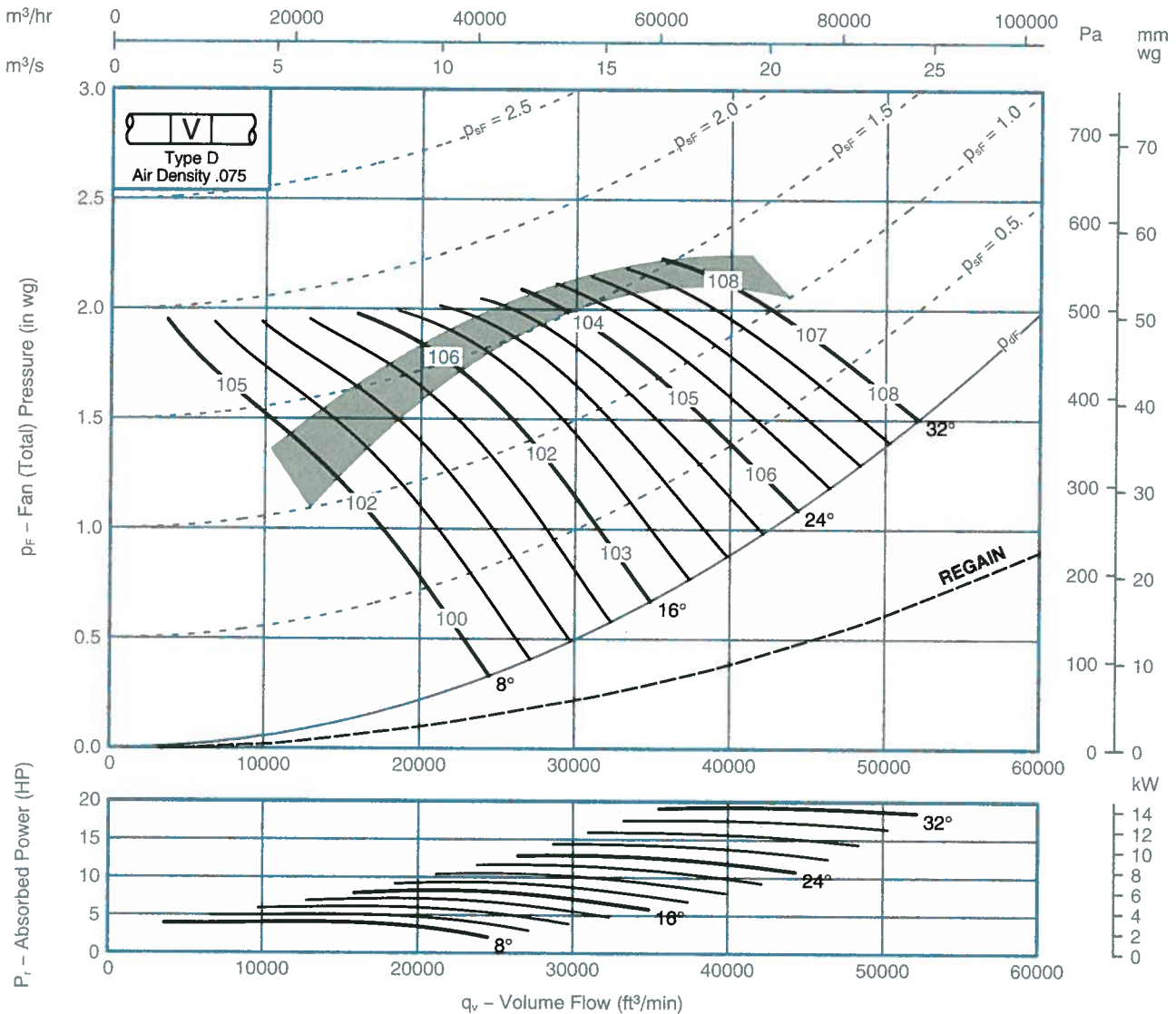
Fan Code: 112JM/31/6/6/...
 1120 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-13	-15	-8	-5	-5	-11	-17	-23
	Lower	-7	-12	-10	-9	-5	-8	-13	-19
16°	Upper	-11	-15	-10	-5	-5	-11	-17	-23
	Lower	-5	-10	-9	-9	-8	-10	-15	-20
24-32°	Upper	-6	-9	-8	-8	-8	-11	-16	-19
	Lower	-4	-7	-9	-10	-10	-12	-16	-20

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-12	-14	-8	-6	-6	-11	-16	-21
	Lower	-7	-12	-10	-10	-6	-7	-13	-18
16°	Upper	-9	-15	-10	-5	-5	-11	-17	-22
	Lower	-4	-10	-9	-10	-8	-10	-14	-19
24-32°	Upper	-5	-9	-8	-8	-8	-11	-15	-18
	Lower	-3	-7	-9	-11	-10	-12	-15	-18

SK10717

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-2	0	0	0	0	0	0



JM AEROFOIL

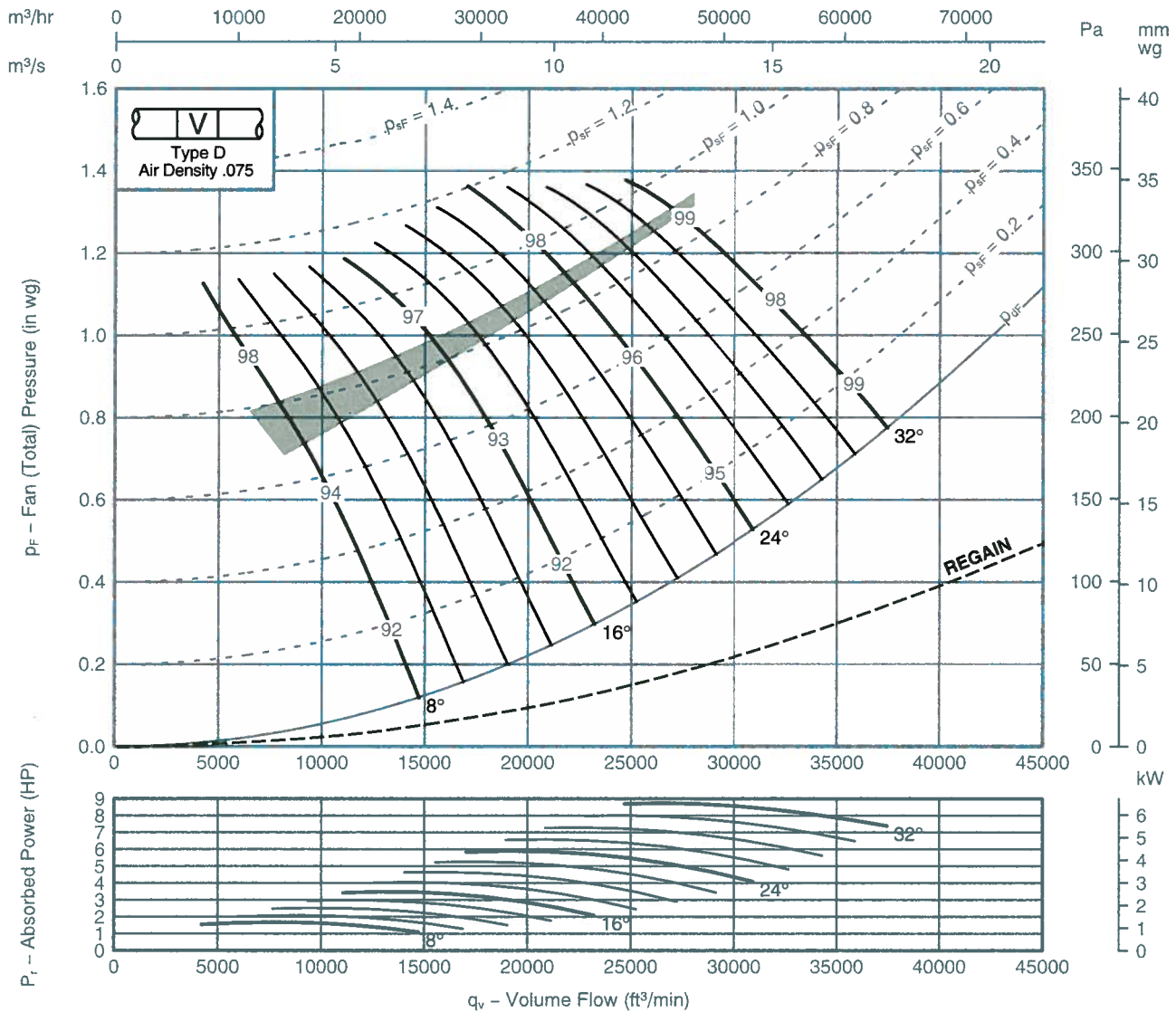
Fan Code: 112JM/40/8/6/...
 1120 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-11	-10	-5	-6	-11	-19	-24	-31
	Lower	-8	-11	-9	-7	-9	-14	-19	-27
16°	Upper	-7	-11	-7	-7	-11	-16	-21	-28
	Lower	-4	-7	-8	-11	-12	-15	-19	-26
24-32°	Upper	-5	-8	-8	-9	-11	-15	-18	-22
	Lower	-5	-7	-7	-10	-11	-16	-19	-23

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-8	-9	-4	-5	-11	-18	-24	-29
	Lower	-4	-9	-8	-5	-8	-13	-18	-25
16°	Upper	-4	-9	-7	-6	-9	-14	-20	-26
	Lower	-2	-6	-8	-10	-11	-14	-19	-25
24-32°	Upper	-2	-7	-8	-8	-11	-14	-17	-21
	Lower	-2	-6	-8	-10	-11	-15	-19	-21

SK11505

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-2	0	0	0	0	0	0



JM AEROFOIL

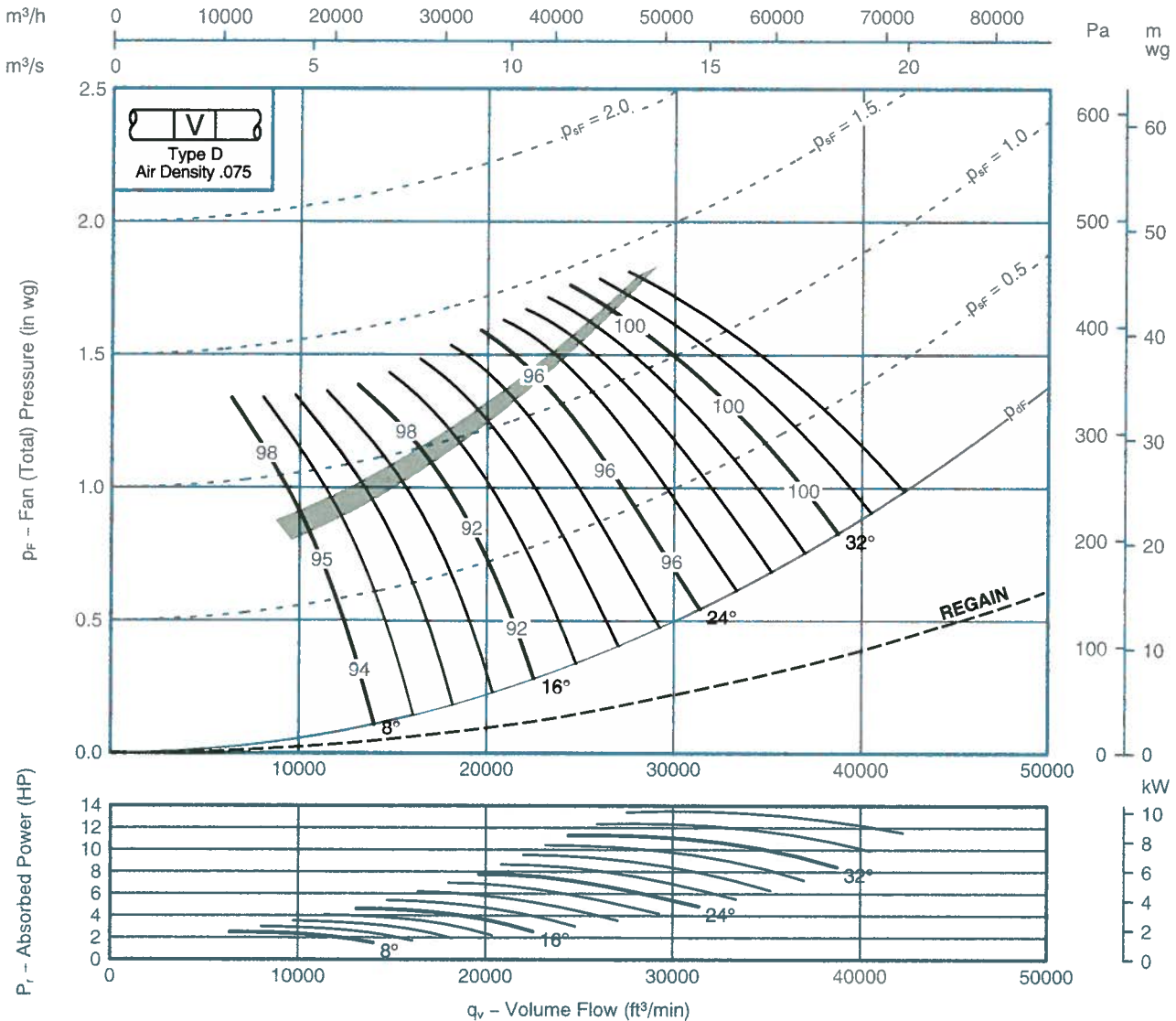
Fan Code: 112JM/40/8/9/...
 1120 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°		-15	-9	-5	-5	-11	-18	-25	-32
		-16	-9	-9	-5	-7	-12	-19	-28
16°		-14	-9	-5	-5	-9	-15	-22	-29
		-12	-7	-8	-8	-8	-11	-17	-24
24-36°		-7	-7	-6	-10	-12	-14	-17	-23
		-7	-6	-6	-10	-12	-14	-17	-24

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°		-12	-6	-4	-4	-11	-17	-23	-30
		-12	-6	-8	-4	-7	-12	-17	-25
16°		-10	-7	-4	-5	-10	-16	-21	-28
		-7	-4	-6	6	9	11	-15	-22
24-36°		-4	-4	-4	-8	-11	-13	-16	-22
		-3	-3	-4	-9	-11	-13	-16	-23

SK11506

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-2	0	0	0	0	0	0



JM AEROFOIL

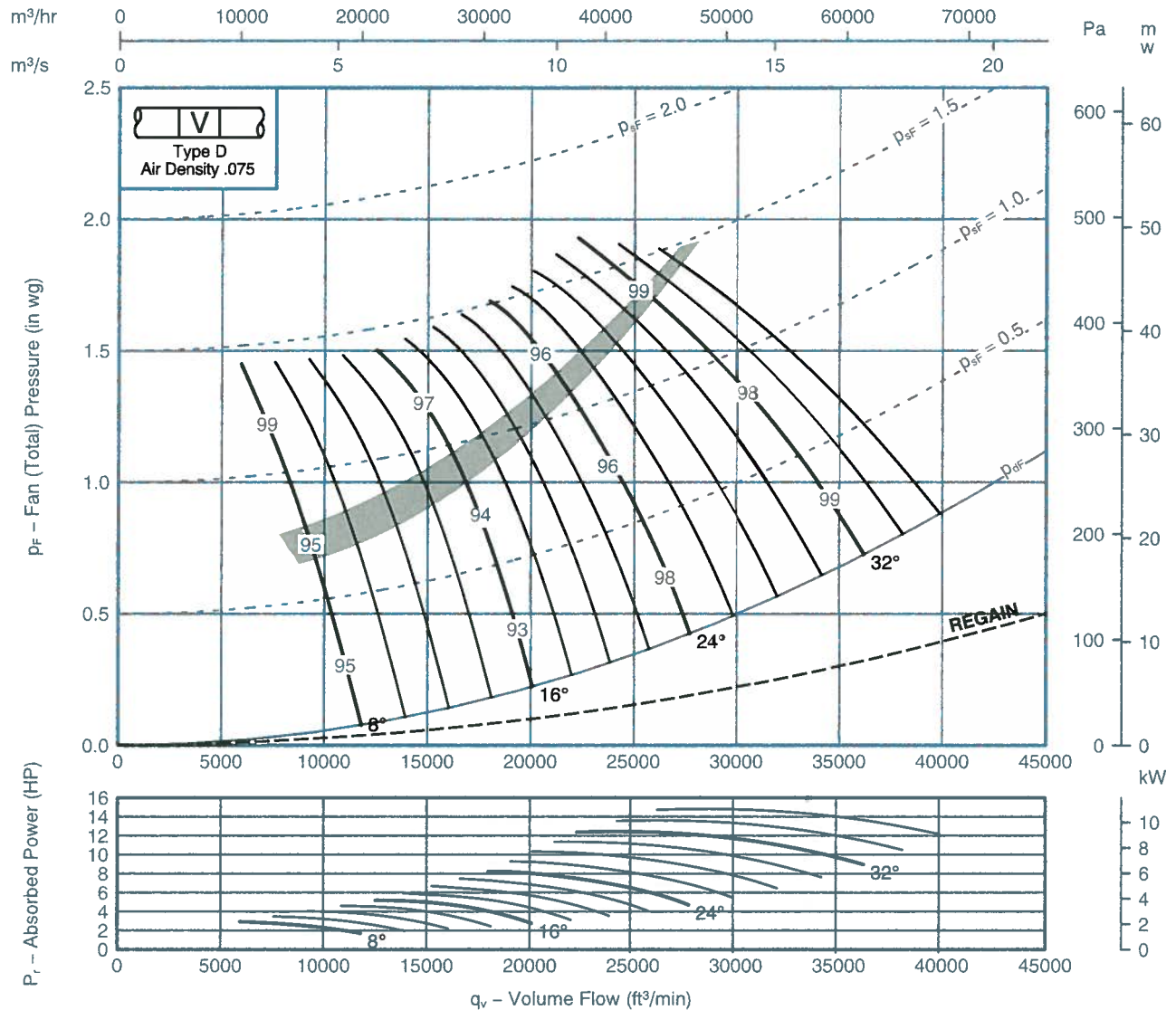
Fan Code: 112JM/50/8/12/...
 1120 mm 875 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-18	-6	-8	-4	-8	-15	-20	-28
	-17	-6	-8	-5	-8	-13	-18	-25
16°	-14	-6	-8	-6	-8	-14	-20	-27
	-12	-4	-9	-8	-9	-13	-17	-25
24-36°	-8	-5	-8	-8	-10	-14	-17	-21
	-8	-4	-8	-8	-10	-14	-17	-23

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-4	-7	-6	-8	-12	-17	-25
	-14	-3	-7	-7	-8	-11	-15	-23
16°	-11	-3	-7	-6	-8	-12	-17	-24
	-9	0	-8	-7	-9	-11	-14	-22
24-36°	-6	-3	-7	-8	-10	-11	-14	-19
	-6	-2	-7	-8	-10	-12	-14	-20

SK11507

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-2	0	0	0	0	0	0



JM AEROFOIL

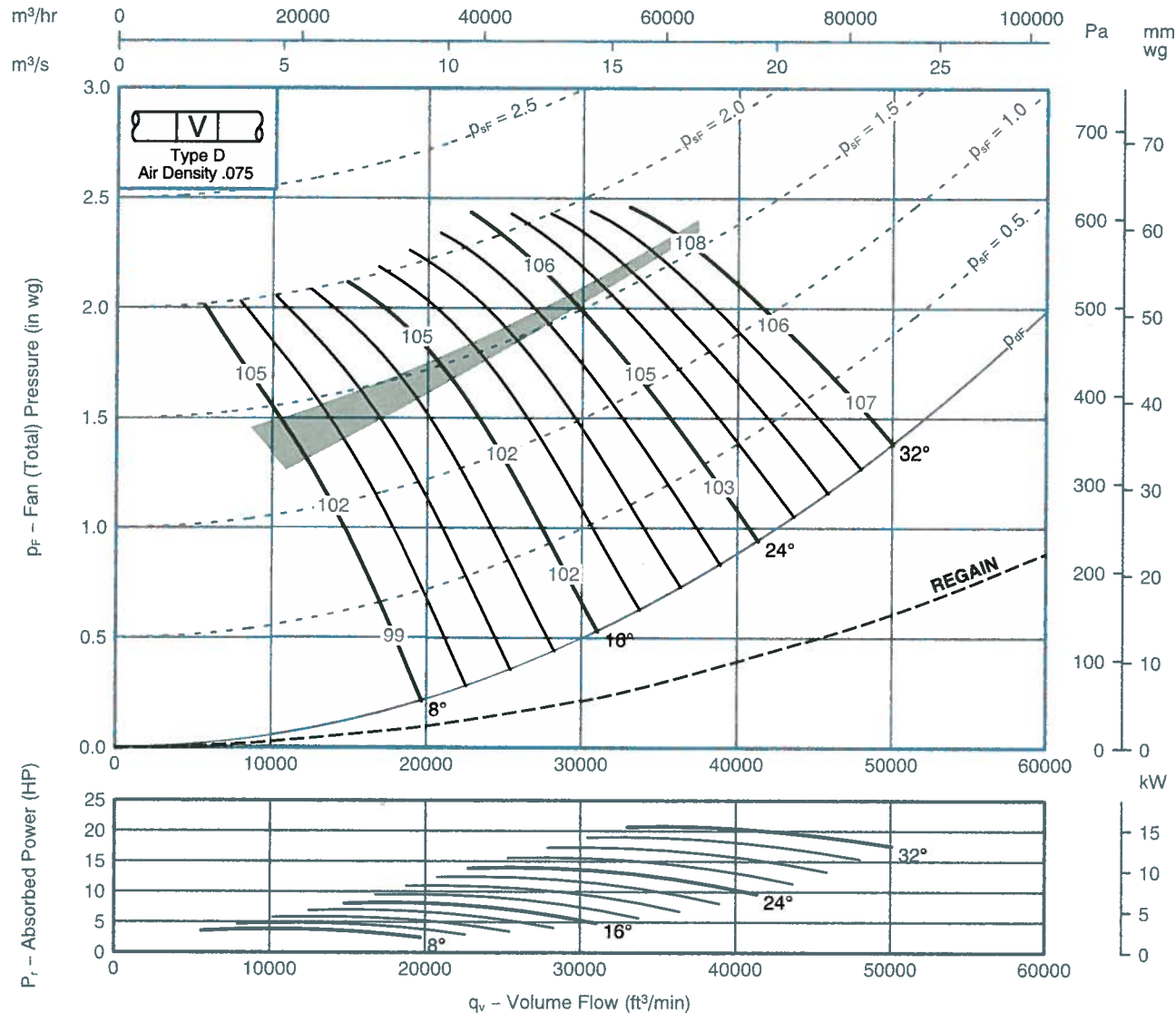
Fan Code: 112JM/40/6/6/...
 1120 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-11	-11	-6	-4	-8	-16	-21	-28
	-8	-8	-8	-6	-7	-11	-16	-23
16°	-6	-9	-8	-7	-9	-13	-18	-25
	-5	-6	-7	-10	-11	-14	-17	-24
24-32°	-5	-8	-7	-9	-10	-14	-17	-21
	-5	-7	-7	-10	-11	-14	-18	-22

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-10	-8	-5	-4	-8	-15	-22	-27
	-7	-5	-8	-6	-6	-11	-16	-22
16°	-3	-7	-7	-7	-8	-13	-18	-24
	-2	-5	-6	-10	-11	-14	-18	-23
24-32°	-2	-6	-6	-9	-10	-13	-17	-20
	-2	-6	-6	-10	-11	-14	-18	-21

SK11508

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-2	0	0	0	0	0	0



JM AEROFOIL

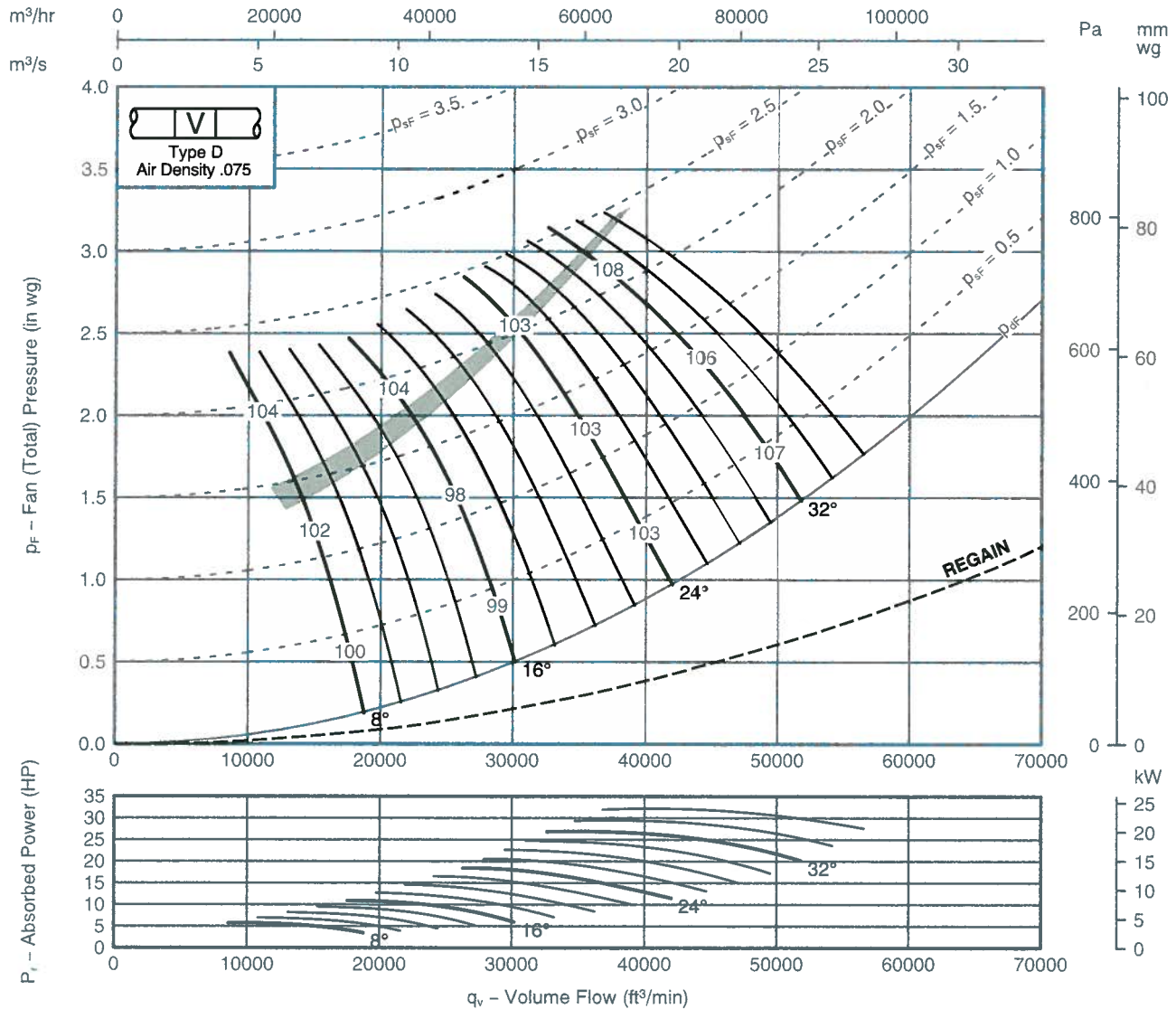
Fan Code: 112JM/40/6/9/...
 1120 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-16	-11	-5	-4	-7	-15	-21	-25	
	-15	-10	-9	-6	-5	-10	-15	-23	
16°	-15	-12	-7	-4	-7	-12	-19	-26	
	-12	-7	-8	-7	-8	-9	-14	-21	
24-36°	-7	-7	-7	-7	-10	-14	-15	-21	
	-7	-6	-7	-8	-11	-14	-15	-22	

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	-13	-8	-5	-4	-8	-15	-20	-27	
	-11	-6	-8	-6	-5	-10	-14	-22	
16°	-11	-10	-6	-4	-8	-13	-18	-26	
	-7	-10	-6	-4	-8	-10	-12	-20	
24-36°	-4	-4	-6	-6	-10	-13	-14	-20	
	-4	-3	-5	-7	-10	-13	-14	-21	

SK11509

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-2	0	0	0	0	0	0



JM AEROFOIL

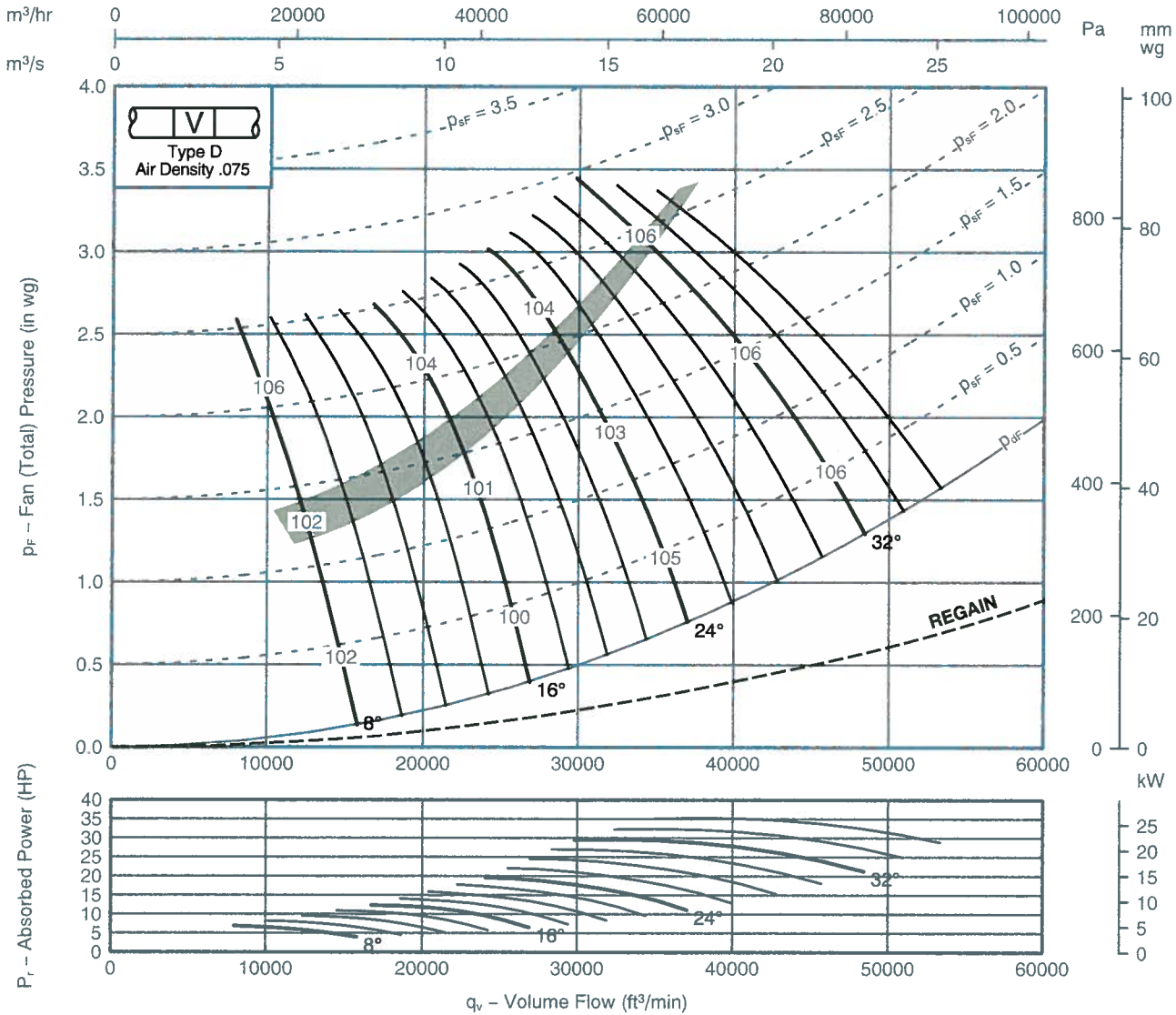
Fan Code: 112JM/50/6/12/...
 1120 mm 1170 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-17	-14	-5	-6	-6	-11	-17	-24
	Lower	-17	-14	-5	-6	-6	-11	-16	-21
16°	Upper	-12	-13	-5	-7	-7	-11	-17	-24
	Lower	-11	-13	-3	-9	-8	-12	-16	-21
24-36°	Upper	-8	-9	-5	-8	-9	-13	-15	-20
	Lower	-8	-9	-4	-9	-9	-13	-16	-21

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-14	-12	-3	-7	-6	-9	-15	-21
	Lower	-13	-12	-3	-8	-6	-9	-13	-19
16°	Upper	-10	-11	-3	-7	-6	-10	-14	-21
	Lower	-9	-11	0	-8	-8	-10	-13	-19
24-36°	Upper	-5	-7	-4	-8	-9	-11	-13	-18
	Lower	-6	-7	-3	-9	-9	-11	-13	-18

SK11510

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-2	0	0	0	0	0	0



JM AEROFOIL

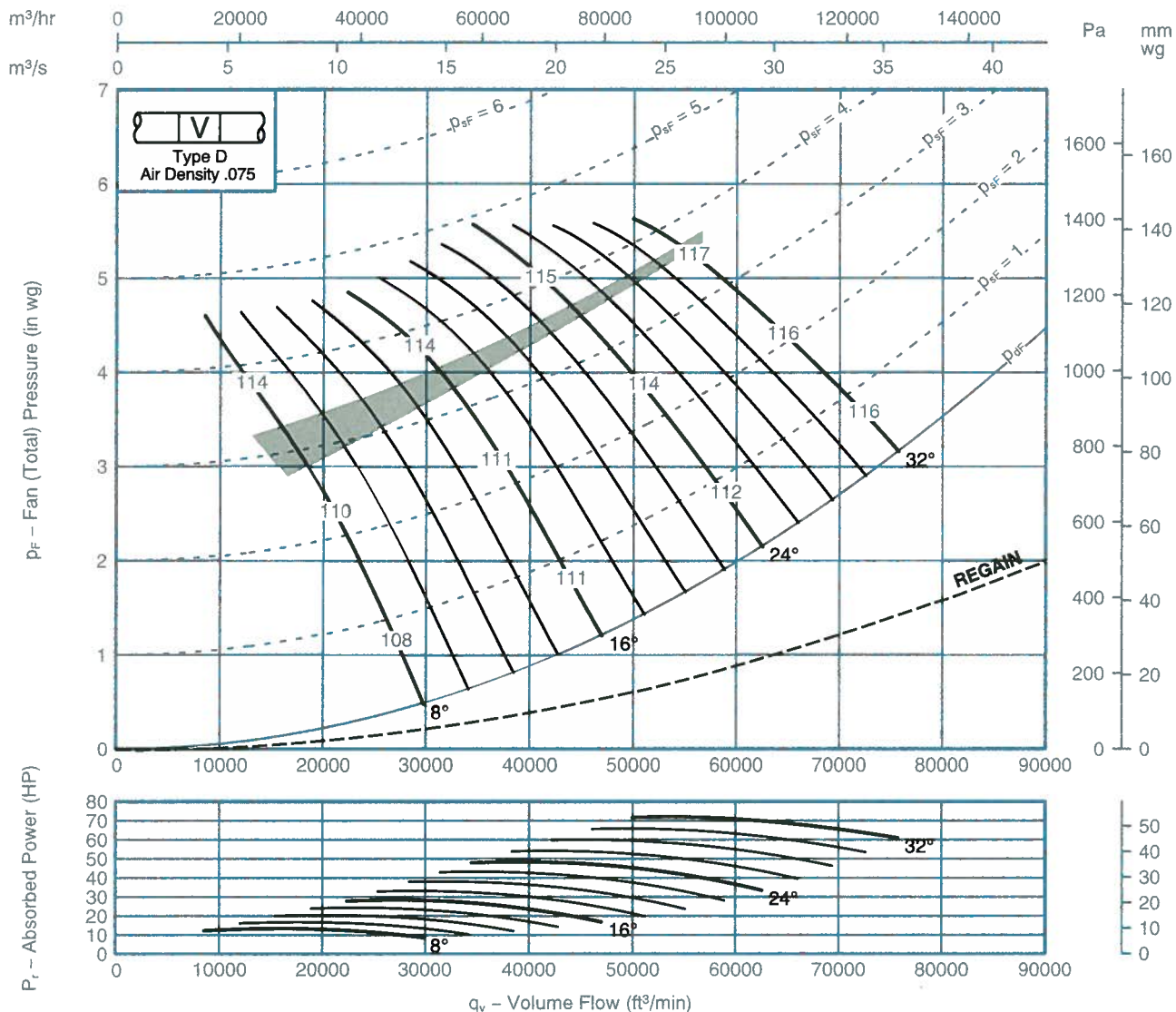
Fan Code: 112JM/40/4/6/...
 1120 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Pitch Angle	Inlet Levels							
	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-10	-10	-4	-6	-11	-19	-24
	-9	-7	-11	-8	-6	-8	-13	-18
16°	-7	-7	-11	-7	-7	-11	-15	-20
	-5	-5	-9	-9	-12	-12	-16	-19
24-32°	-6	-6	-10	-8	-9	-12	-15	-19
	-6	-6	-8	-8	-11	-12	-17	-20

Pitch Angle	Outlet Levels							
	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-11	-8	-9	-4	-5	-11	-19	-23
	-8	-5	-10	-8	-6	-8	-14	-17
16°	-5	-5	-11	-7	-7	-10	-16	-18
	-4	-4	-9	-9	-11	-12	-16	-18
24-32°	-4	-4	-9	-8	10	-11	-15	-18
	-4	-4	-8	-8	-11	-12	-16	-19

SK11511

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-2	0	0	0	0	0	0



JM AEROFOIL

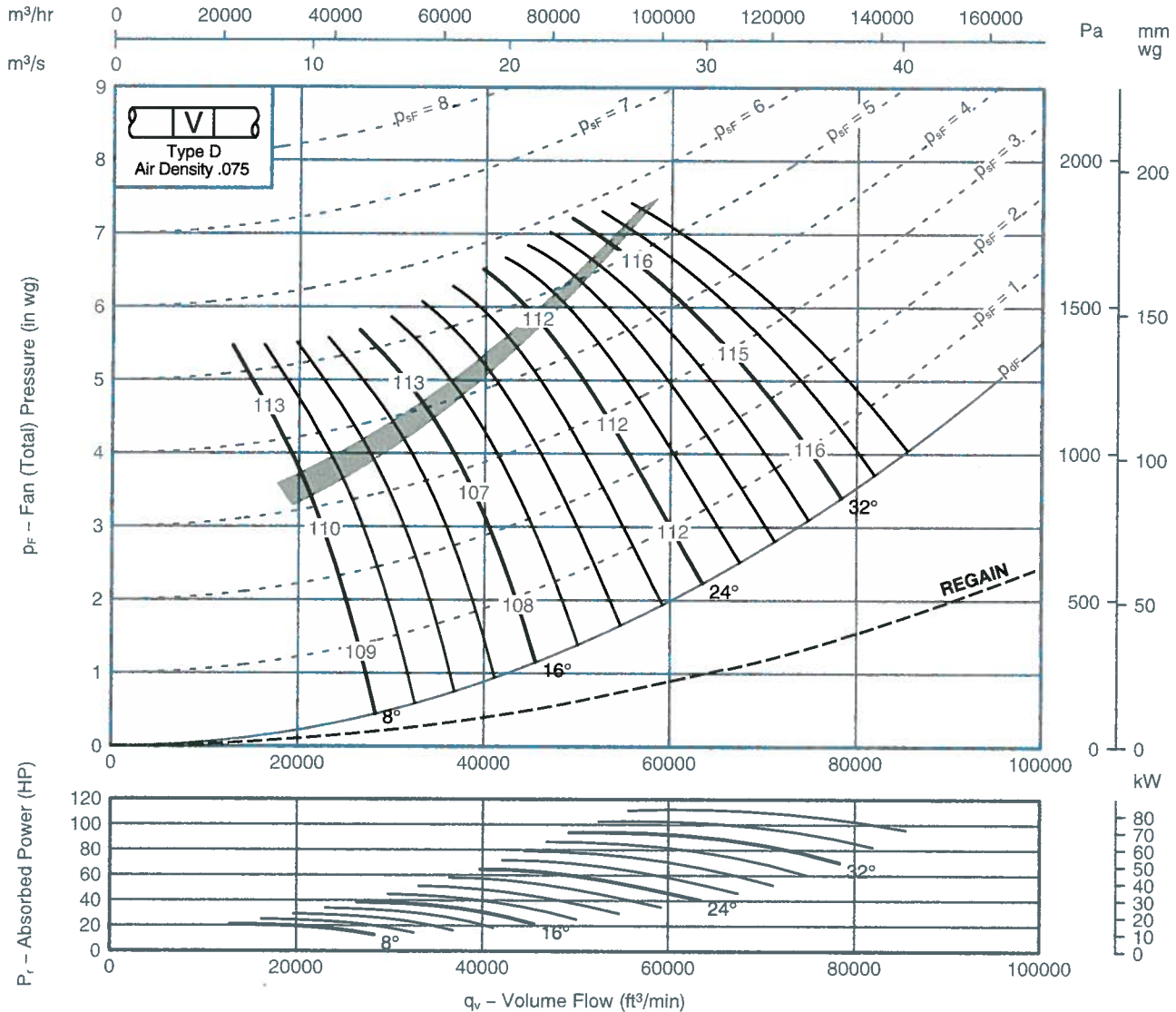
Fan Code: 112JM/40/4/9/...
 1120 mm 1770 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-14	-9	-4	-5	-10	-17	-24
	-16	-16	-8	-8	-5	-6	-12	-18
16°	-16	-14	-9	-5	-5	-9	-15	-22
	-13	-12	-6	-7	-7	-8	-10	-16
24-36°	-8	-8	-7	-6	-10	-12	-14	-17
	-8	-7	-6	-6	-11	-13	-15	-17

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-12	-7	-4	-5	-10	-16	-22
	-13	-13	-6	-8	-5	-7	-11	-16
16°	-12	-11	-8	-6	-6	-10	-14	-21
	-9	-9	-4	-7	-8	-9	-9	-15
24-36°	-5	-4	-6	-5	-10	-11	-14	-16
	-5	-4	-4	-5	-10	-12	-14	-16

SK11512

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-2	0	0	0	0	0	0



JM AEROFOIL

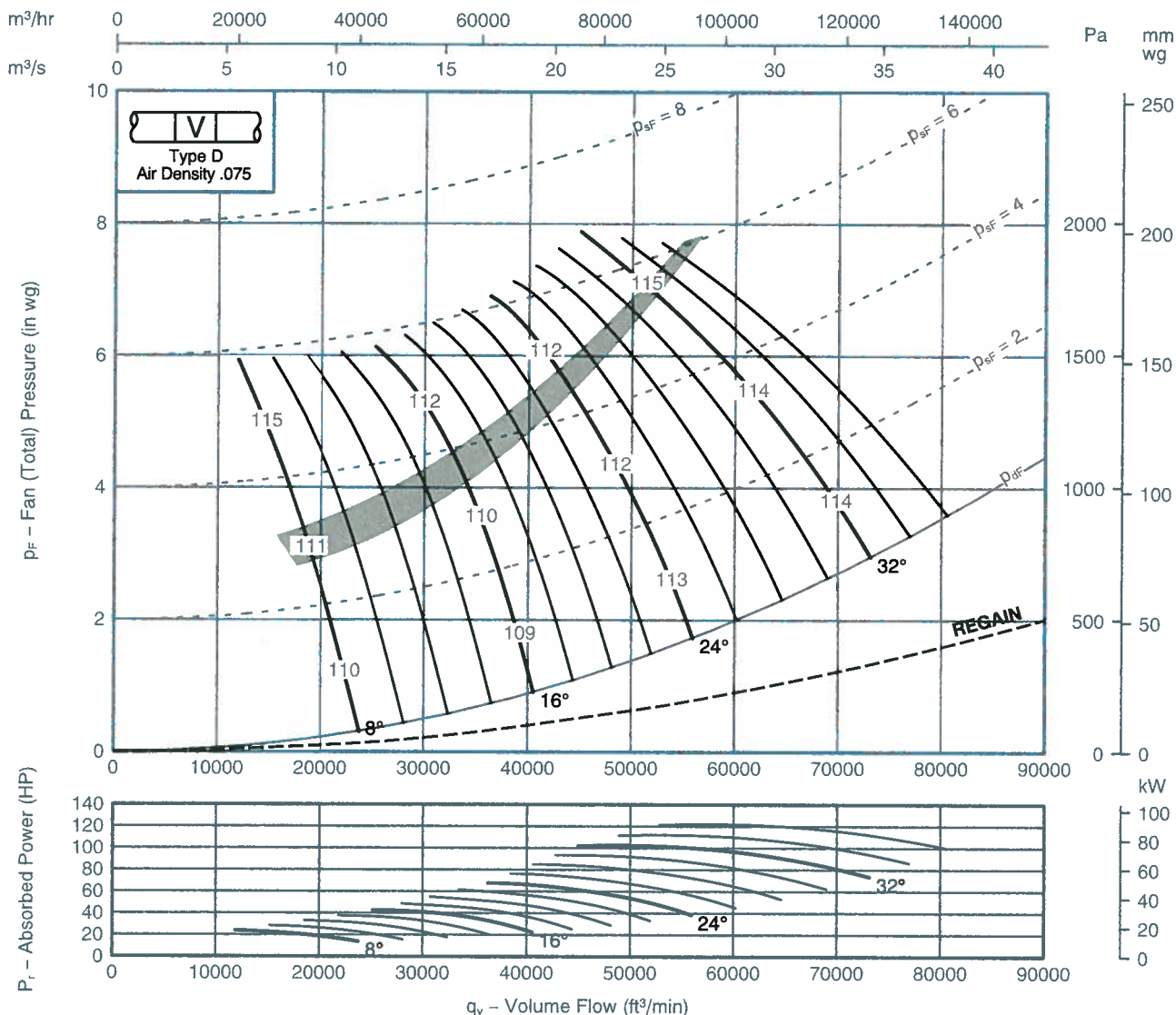
Fan Code: 112JM/50/4/12/...
 1120 mm 1770 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

		Inlet Levels							
		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Below shaded	-17	-18	-6	-8	-5	-9	-16	-21
	Above shaded	-17	-17	-5	-8	-5	-9	-14	-19
16°	Below shaded	-12	-15	-5	-7	-6	-9	-15	-21
	Above shaded	-11	-14	-3	-9	-8	-10	-14	-19
24-36°	Below shaded	-8	-9	-5	-9	-9	-11	-15	-18
	Above shaded	-8	-10	-4	-9	-9	-11	-15	-18

		Outlet Levels							
		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Below shaded	-14	-16	-4	-8	-4	-6	-13	-18
	Above shaded	-14	-15	-3	-8	-5	-7	-12	-17
16°	Below shaded	-10	-13	-3	-7	-6	-7	-12	-18
	Above shaded	-9	-12	-1	-9	-8	-9	-11	-16
24-36°	Below shaded	-6	-7	-4	-8	-9	-9	-12	-16
	Above shaded	-6	-7	-3	-9	-9	-9	-12	-16

SK11513

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-2	0	0	0	0	0	0



JM AEROFOIL

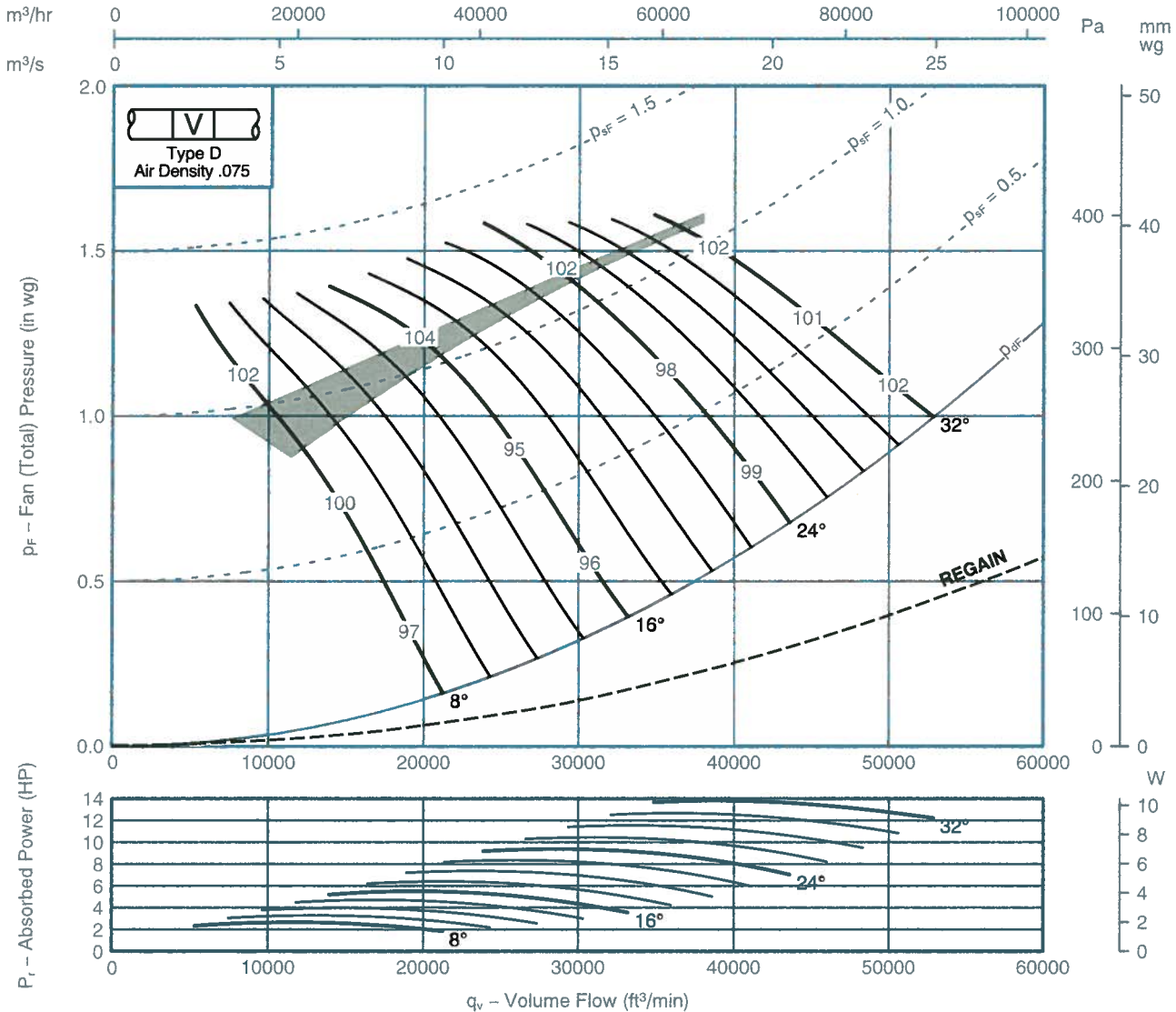
Fan Code: 125JM/40/8/6/...
 1250 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-7	-4	-6	-13	-20	-25	-30
	-13	-12	-7	-4	-7	-14	-18	-26
16°	-11	-11	-7	-4	-8	-14	-20	-26
	-6	-6	-8	9	-10	-13	-15	-23
24-32°	-8	-8	-7	-5	-11	-15	-18	-21
	-6	-6	-8	-9	-11	-15	-17	-20

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-6	-4	-6	-12	-20	-25	-28
	-11	-11	-7	-4	-7	-14	-18	-25
16°	-8	-9	-7	-4	-8	-13	-20	-24
	-4	-5	-8	-9	-9	-13	-16	-22
24-32°	-6	-7	-8	-5	-11	-14	-18	-20
	-3	-5	-8	-9	-11	-14	-17	-19

SK11514

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

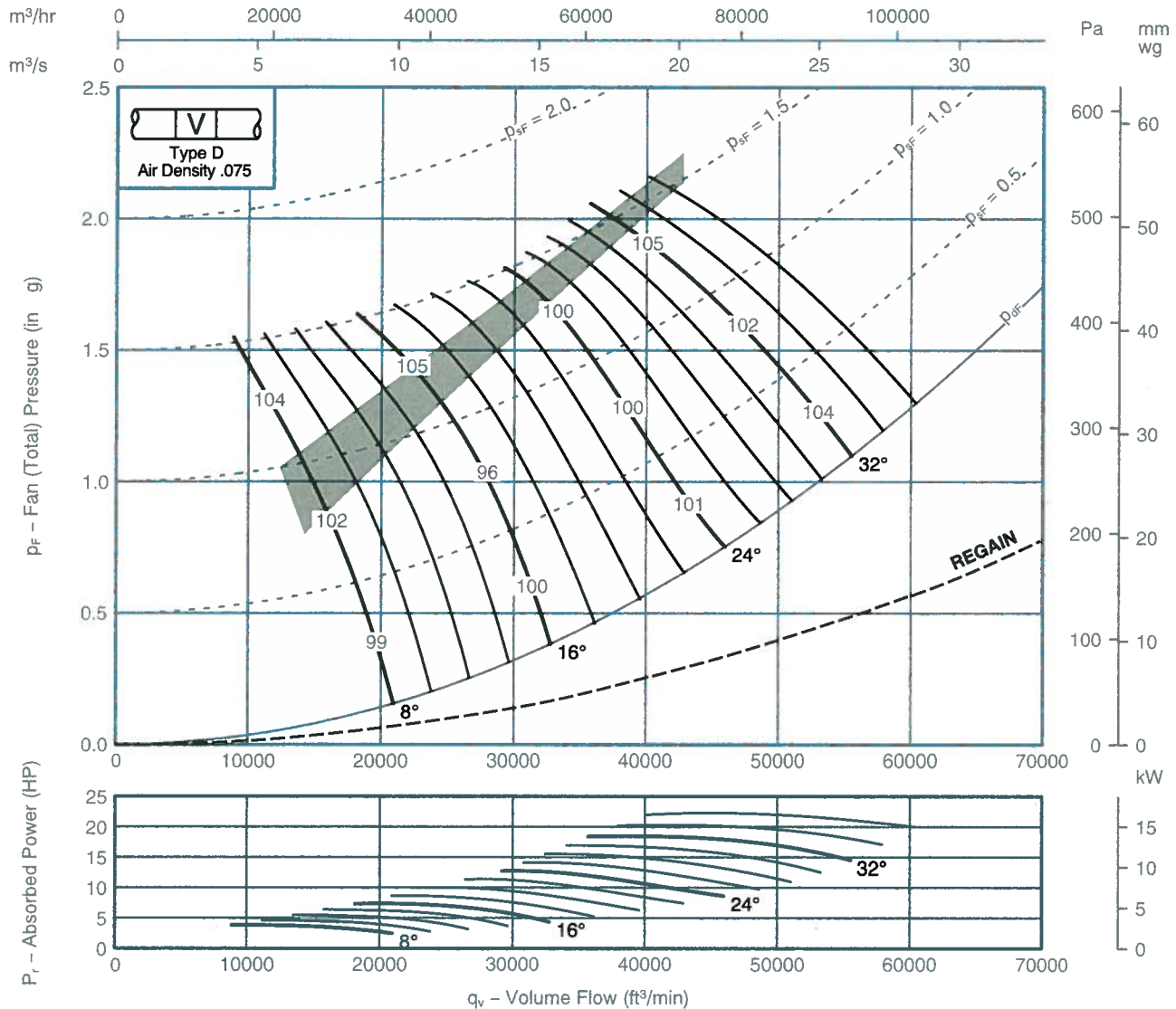
Fan Code: 125JM/40/8/9/...
 1250 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Pitch Angle	Inlet Levels							
	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-20	-11	-6	-3	-10	-18	-26	-32
	-22	-12	-10	-3	-7	-13	-18	-27
16°	-20	-9	-6	-4	-9	-17	-25	-31
	-16	-7	-8	-5	-7	-11	-15	-23
24-36°	-8	-7	-7	-7	-10	-13	-18	-24
	-8	-6	-7	-7	-10	-13	-15	-22

Pitch Angle	Outlet Levels							
	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-19	-8	-6	-3	-11	-18	-24	-31
	-18	-9	-10	-2	-7	-13	-16	-25
16°	-16	-7	-5	-4	-11	-18	-24	-30
	-12	-5	-7	-4	-8	-11	-14	-22
24-36°	-5	-5	-5	-6	-10	-13	-17	-23
	-5	-4	-5	-6	-9	-12	-14	-21

SK11515

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

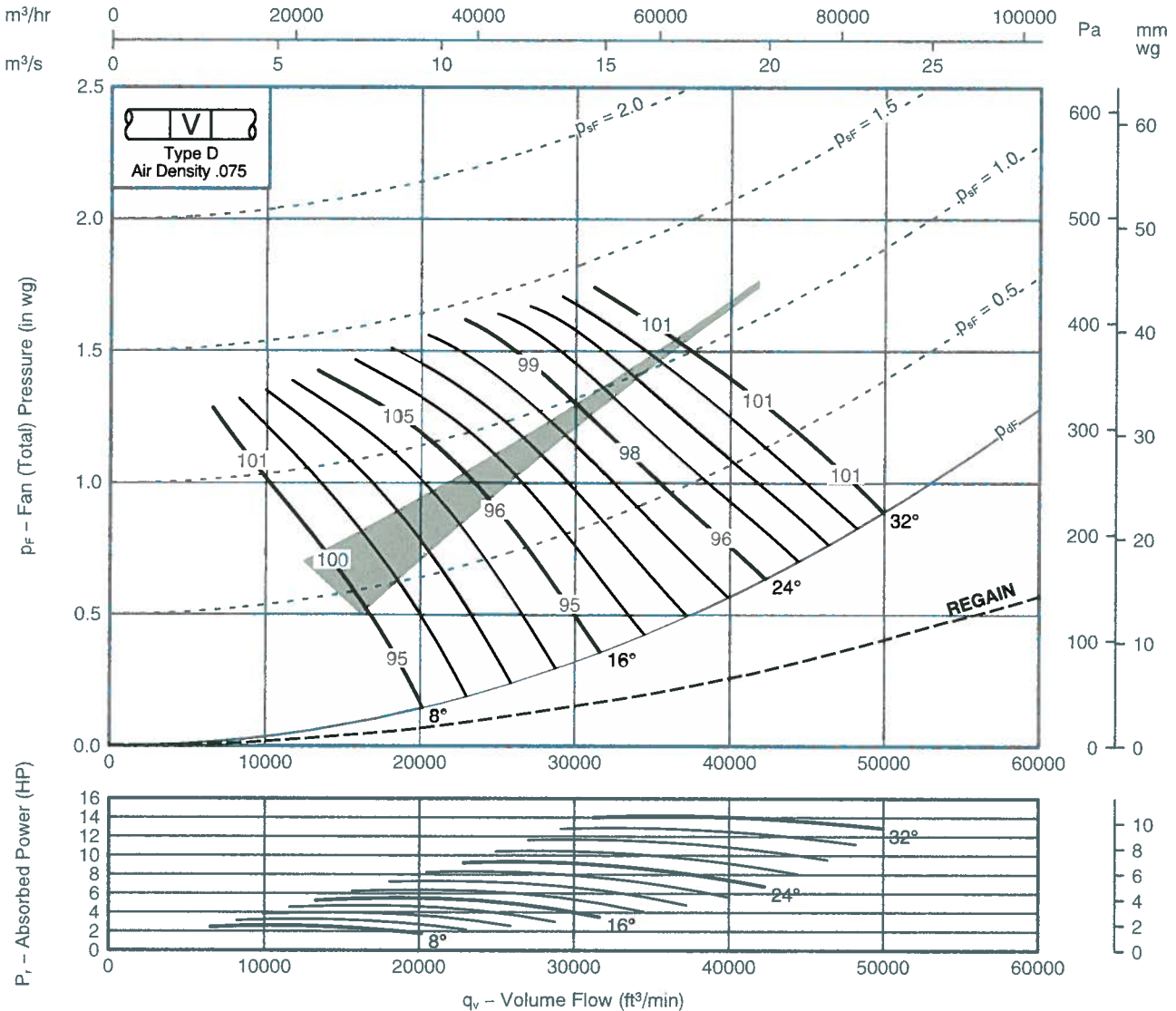
Fan Code: 125JM/50/8/6/...
 1250 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-12	-10	-12	-3	-8	-17	-23	-28
	-9	-9	-8	-5	-8	-12	-14	-21
16°	-11	-9	-7	-4	-11	-16	-22	-26
	-5	-6	-7	-10	-11	-15	-18	-22
24-32°	-6	-7	-7	-8	-11	-13	-15	-18
	-6	-6	-7	-9	-11	-14	-16	-19

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-9	-10	-10	-2	-7	-17	-22	-26
	-6	-8	-8	-5	-7	-12	-13	-19
16°	-8	-9	-6	-3	-12	-16	-21	-26
	-3	-5	-6	-10	-12	-14	-17	-22
24-32°	-3	-5	-7	-8	-12	-13	-14	-18
	-3	-5	-7	-8	-12	-13	-15	-19

SK11516

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

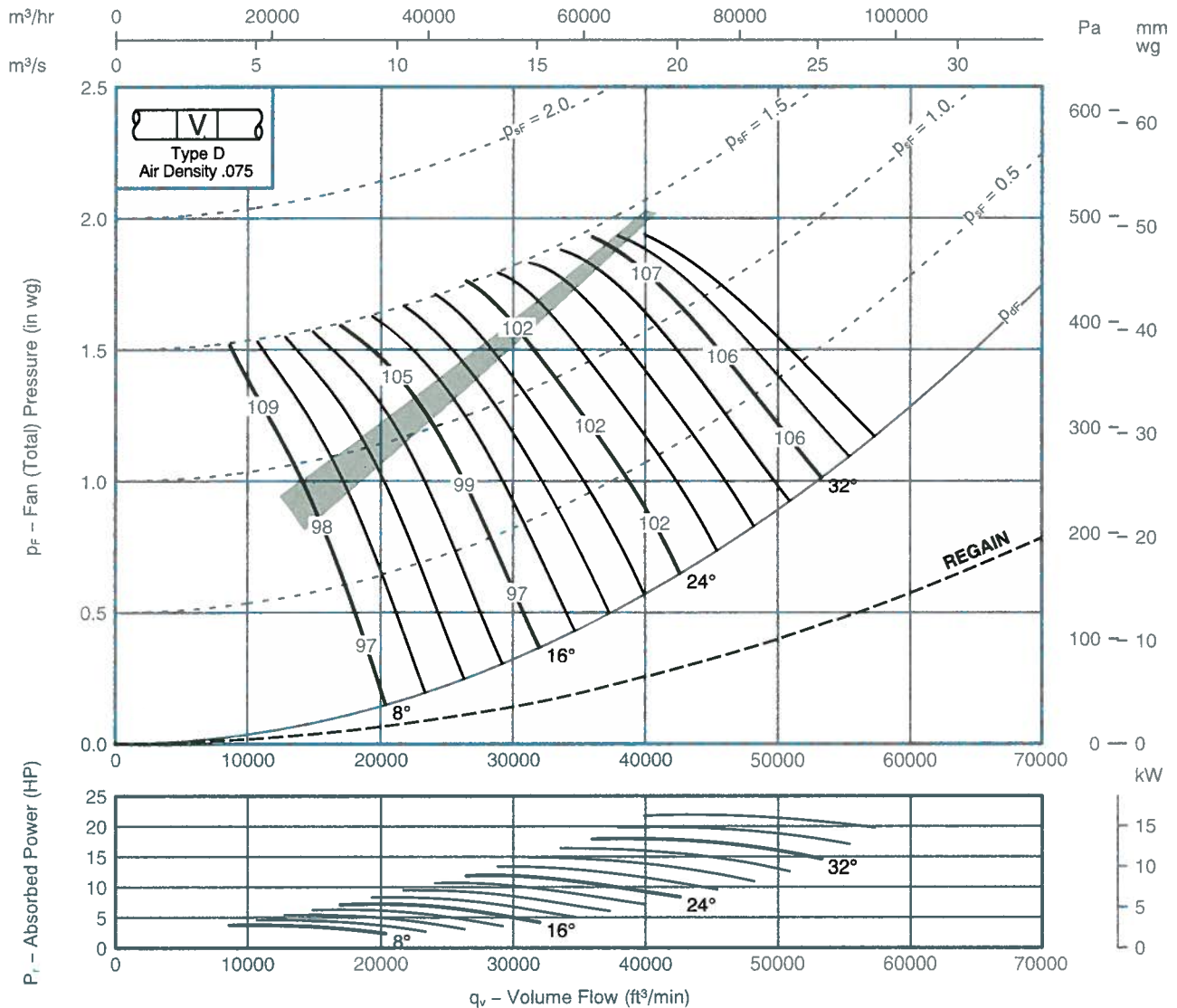
Fan Code: 125JM/50/8/9/...
 1250 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-15	-11	-7	-3	-8	-15	-21	-27
	Lower	-11	-6	-9	-6	-8	-12	-14	-23
16°	Upper	-13	-7	-5	-5	-11	-17	-23	-29
	Lower	-10	-4	-8	-9	-11	-14	-16	-24
24-36°	Upper	-7	-6	-7	-8	-11	-16	-19	-23
	Lower	-8	-4	-7	-10	-12	-15	-19	-24

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-13	-9	-6	-3	-8	-14	-20	-26
	Lower	-18	-4	-8	-5	-8	-11	-13	-22
16°	Upper	-11	-6	-3	-5	-10	-16	-22	-27
	Lower	-7	-2	-6	-9	-10	-13	-15	-23
24-36°	Upper	-4	-5	-5	-7	-11	-15	-17	-22
	Lower	-4	-3	-4	-9	-11	-14	-17	-22

SK11517

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

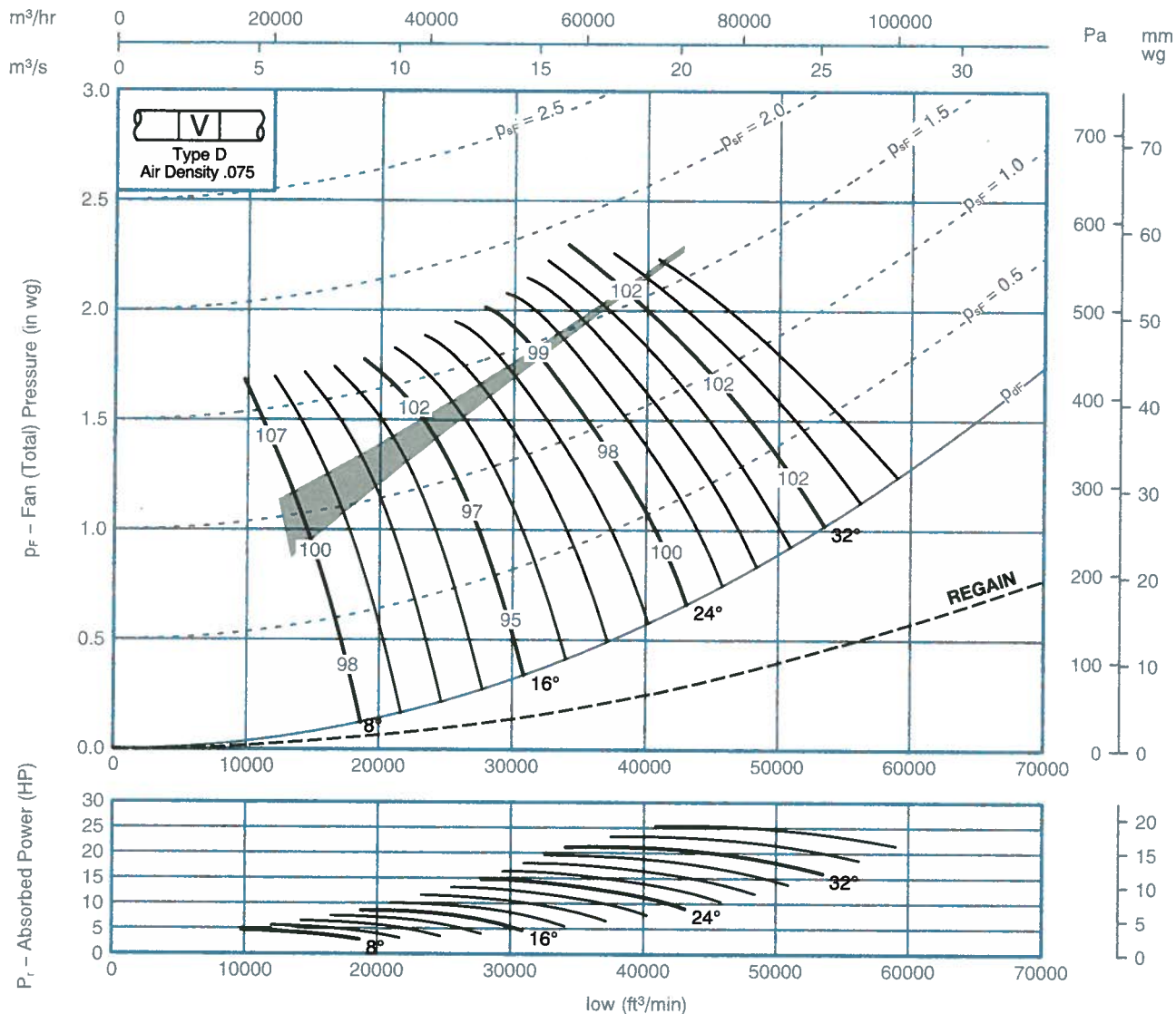
Fan Code: 125JM/50/8/12/...
 1250 mm 875 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-20	-8	-9	-4	-7	-15	-21	-29
	-17	-5	-8	-5	-8	-14	-18	-26
16°	-15	-9	-6	-5	-7	-15	-22	-29
	-12	-4	-9	-7	-9	-13	-18	-25
24-36°	-8	-6	-7	-7	-10	-14	-17	-21
	-8	-5	-9	-8	-10	-13	-16	-22

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-16	-5	-8	-5	-7	-13	-18	-27
	-14	-3	-7	-7	-8	-11	-15	-24
16°	-13	-6	-5	-5	-7	-13	-18	-26
	-9	-1	-8	-7	-9	-11	-15	-22
24-36°	-6	-4	-7	-7	-10	-12	-14	-19
	-6	-3	-8	-8	-10	-11	-13	-20

SK11518

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

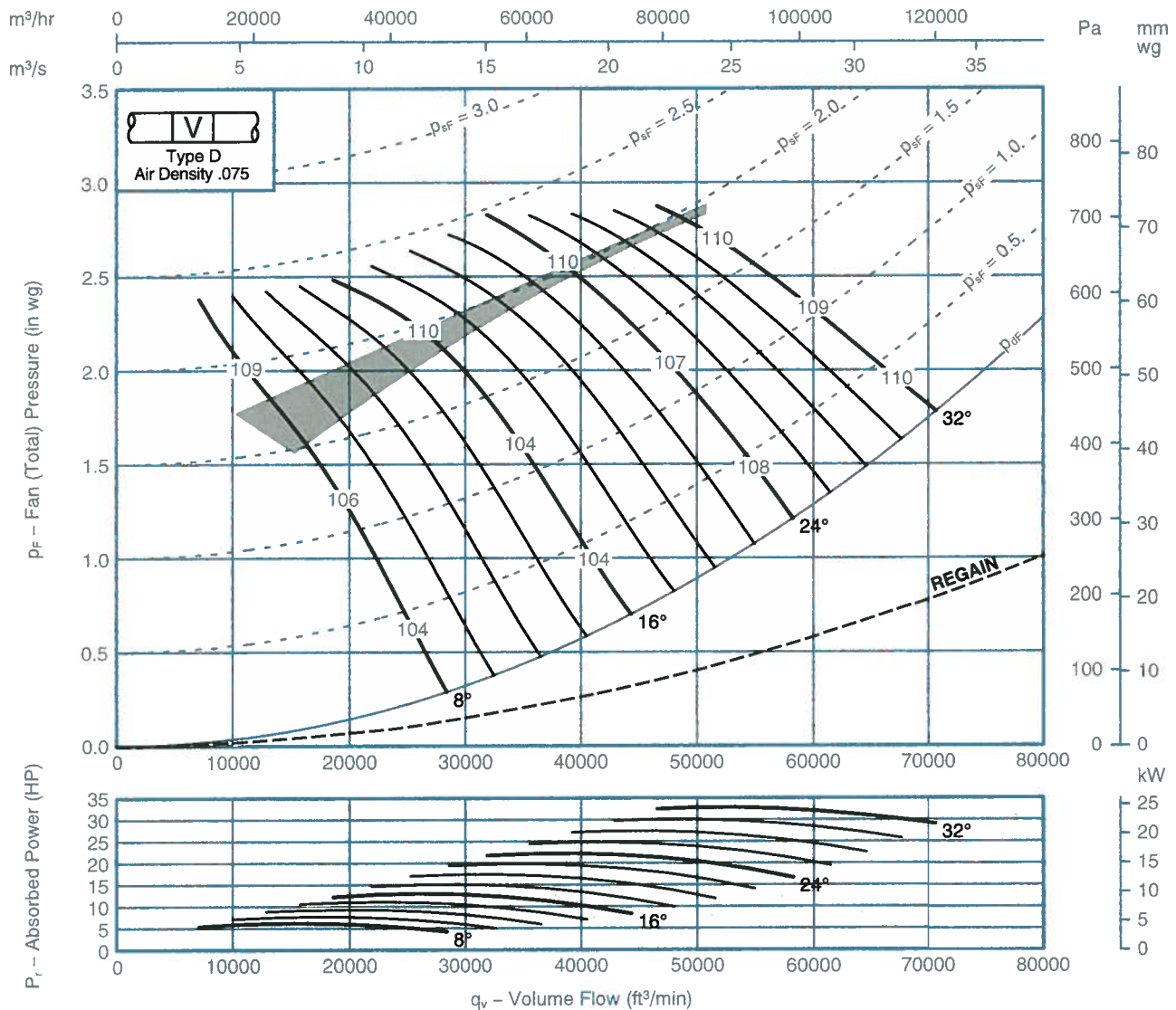
Fan Code: 125JM/40/6/6/...
 1250 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

		Inlet Levels							
		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-16	-10	-5	-4	-9	-17	-22	-27
	Lower	-13	-14	-10	-4	-5	-11	-16	-21
16°	Upper	-11	-11	-8	-5	-6	-11	-18	-24
	Lower	-6	-7	-6	-9	-9	-12	-15	-20
24-32°	Upper	-8	-9	-7	-6	-7	-14	-17	-20
	Lower	-6	-7	-6	-9	-10	-14	-16	-19

		Outlet Levels							
		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-15	-7	-4	-4	-9	-17	-23	-26
	Lower	-12	-11	-10	-4	-5	-10	-17	-20
16°	Upper	-9	-9	-8	-5	-6	-11	-18	-23
	Lower	-4	-5	-6	-9	-9	-12	-15	-19
24-32°	Upper	-6	-7	-6	-6	-7	-13	-17	-19
	Lower	-4	-5	-5	-9	-10	-13	-17	-18

SK11519

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

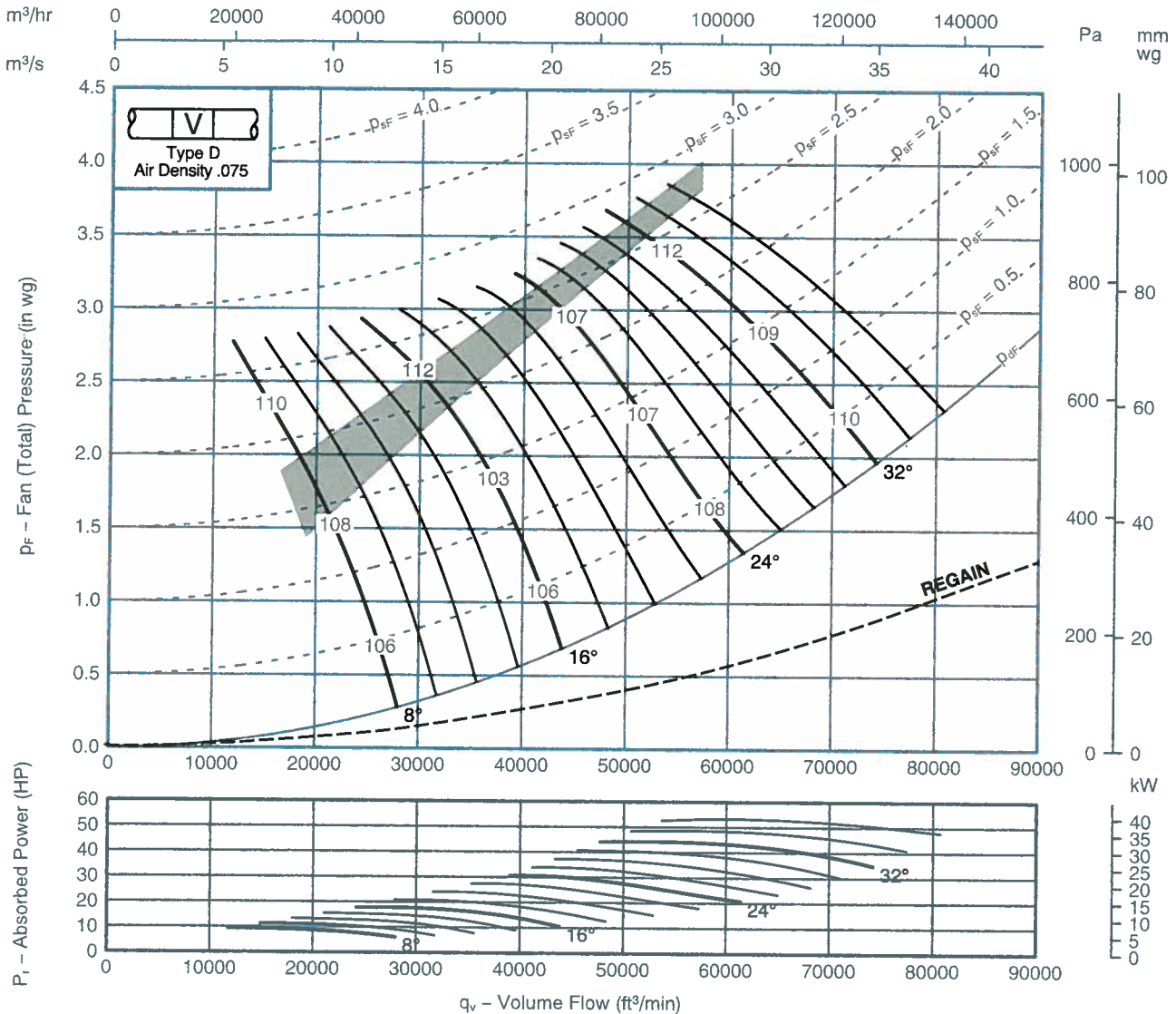
Fan Code: 125JM/40/6/9/...
 1250 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-23	-14	-6	-3	-7	-15	-23	-29
	-21	-14	-10	-5	-4	-11	-16	-22
16°	-22	-15	-7	-4	-6	-14	-22	-28
	-17	-8	-9	-6	-5	-9	-14	-19
24-36°	-9	-7	-7	-7	-8	-13	-16	-22
	-8	-6	-7	-8	-8	-12	-14	-19

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-21	-11	-6	-3	-7	-15	-22	-28
	-17	-11	-9	-5	-4	-11	-15	-20
16°	-18	-12	-6	-4	-7	-14	-21	-28
	-13	-5	-8	-5	-7	-10	-12	-18
24-36°	-6	-4	-6	-6	-7	-12	-15	-21
	-5	-4	-6	-6	-7	-12	-13	-18

SK11520

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

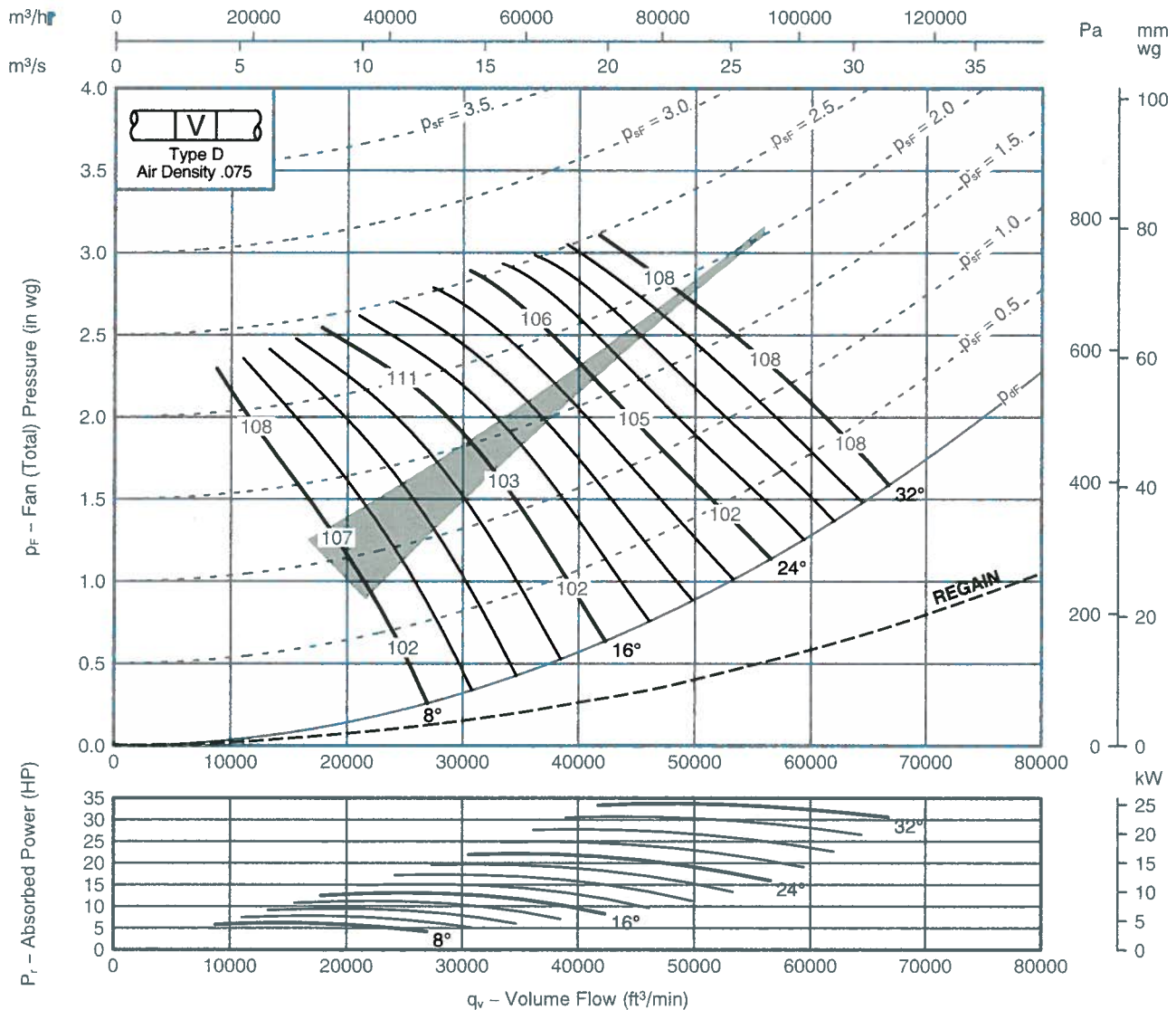
Fan Code: 125JM/50/6/6/...
 1250 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-10	-10	-6	-4	-13	-21	-25
	-14	-8	-8	-7	-6	-10	-14	-16
16°	-16	-9	-7	-4	-7	-14	-20	-24
	-9	-5	-6	-10	-10	-13	-17	-20
24-32°	-7	-6	-7	-8	-10	-13	-15	-17
	-7	-6	-7	-9	-10	-13	-15	-18

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-8	-9	-6	-3	-13	-20	-24
	-12	-5	-7	-6	-5	-10	-13	-15
16°	-14	-8	-7	-4	-8	-13	-19	-24
	-8	-3	-5	-9	-11	-14	-16	-20
24-32°	-5	-5	-6	-8	-11	-12	-14	-17
	-4	-4	-6	-8	-11	-12	-14	-18

SK11521

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

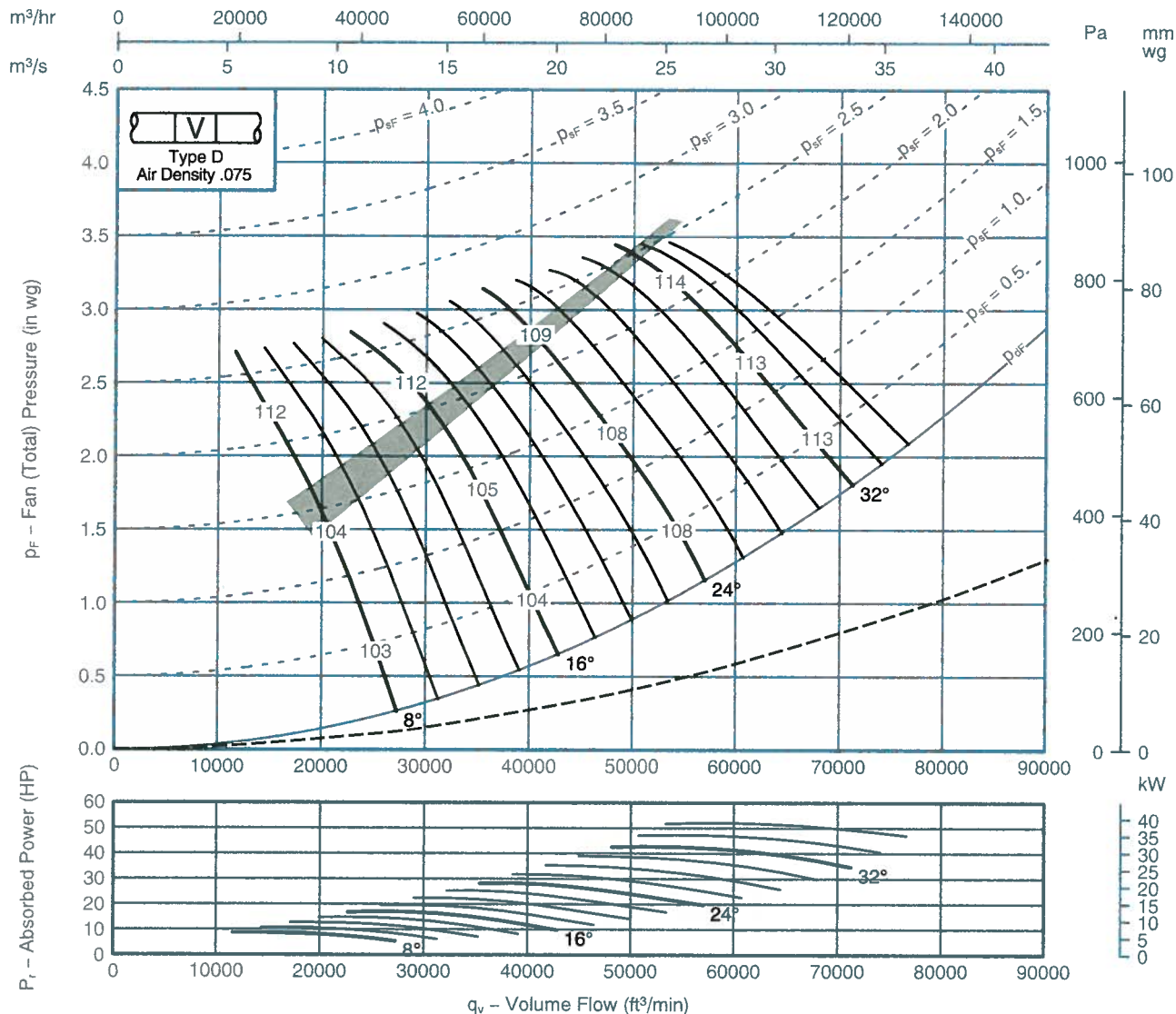
Fan Code: 125JM/50/6/9/...
 1250 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-18	-12	-9	-4	-5	-13	-18	-26
	-13	-8	-6	-7	-6	-11	-13	-19
16°	-16	-9	-5	-4	-8	-15	-20	-27
	-12	-7	-4	-9	-9	-12	-15	-20
24-36°	-8	-8	-5	-9	-10	-14	-18	-21

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-16	-10	-8	-4	-5	-11	-17	-24
	-11	-6	-5	-6	-6	-9	-12	-18
16°	-13	-7	-3	-4	-8	-14	-19	-26
	-9	-5	-2	-9	-9	-11	-14	-18
24-36°	-4	-7	-4	-8	-9	-13	-16	-20
	-5	-5	-1	-9	-10	-13	-16	-20

SK11522

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

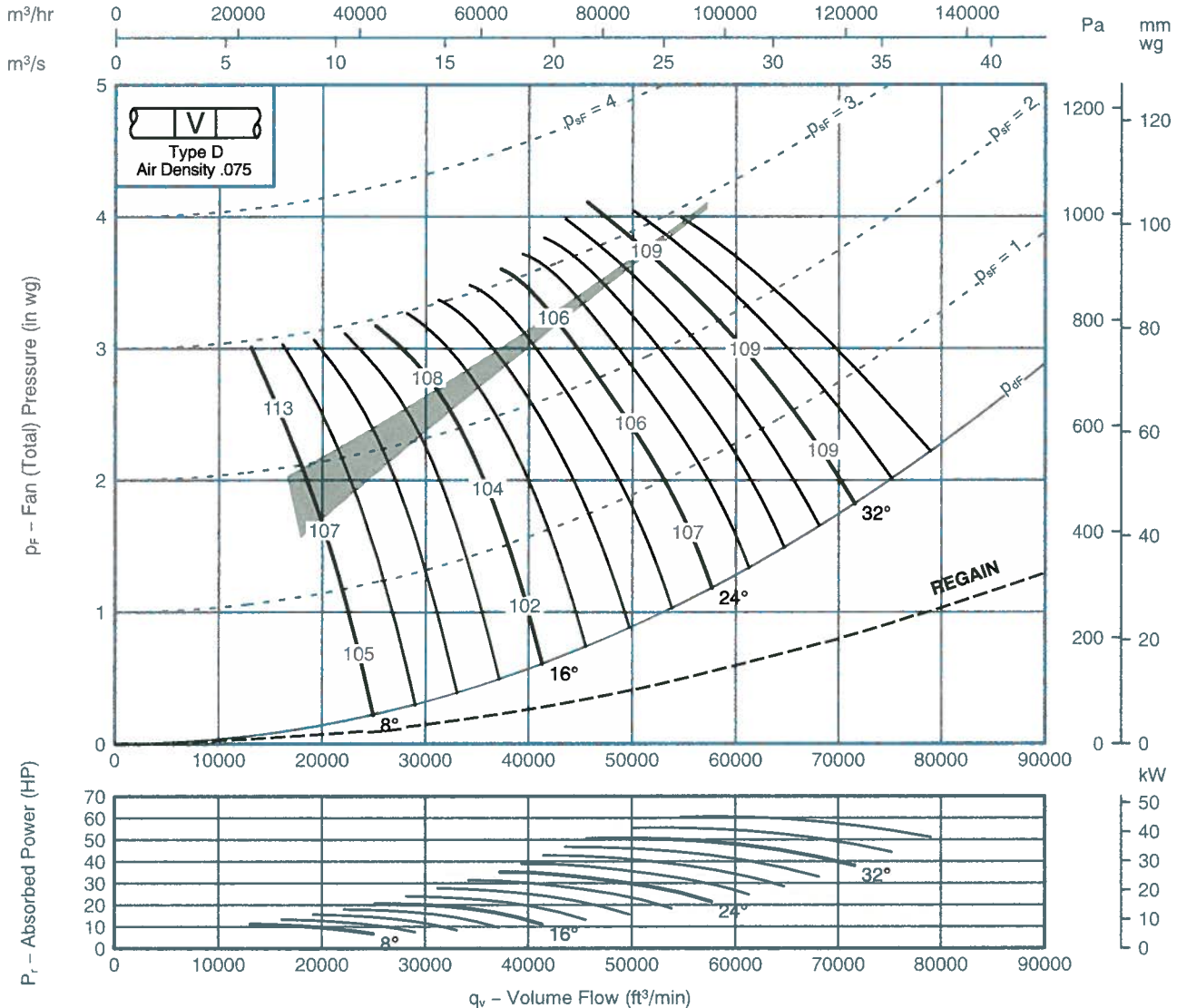
Fan Code: 125JM/50/6/12/...
 1250 mm 1170 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-19	-15	-6	-5	-5	-11	-18	-25
	Lower	-17	-14	-4	-6	-6	-11	-18	-25
16°	Upper	-14	-13	-6	-5	-5	-11	-18	-25
	Lower	-11	-12	-3	-8	-8	-12	-16	-21
24-36°	Upper	-8	-10	-6	-8	-8	-13	-15	-20
	Lower	-8	-9	-5	-9	-9	-12	-15	-20

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-15	-13	-5	-6	-5	-9	-15	-23
	Lower	-13	-12	-3	-8	-6	-9	-14	-20
16°	Upper	-12	-12	-4	-5	-5	-10	-16	-23
	Lower	-8	-10	-1	-8	-8	-10	-13	-19
24-36°	Upper	-5	-8	-4	-8	-9	-11	-13	-17
	Lower	-5	-7	-3	-9	-9	-10	-12	-18

SK11523

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

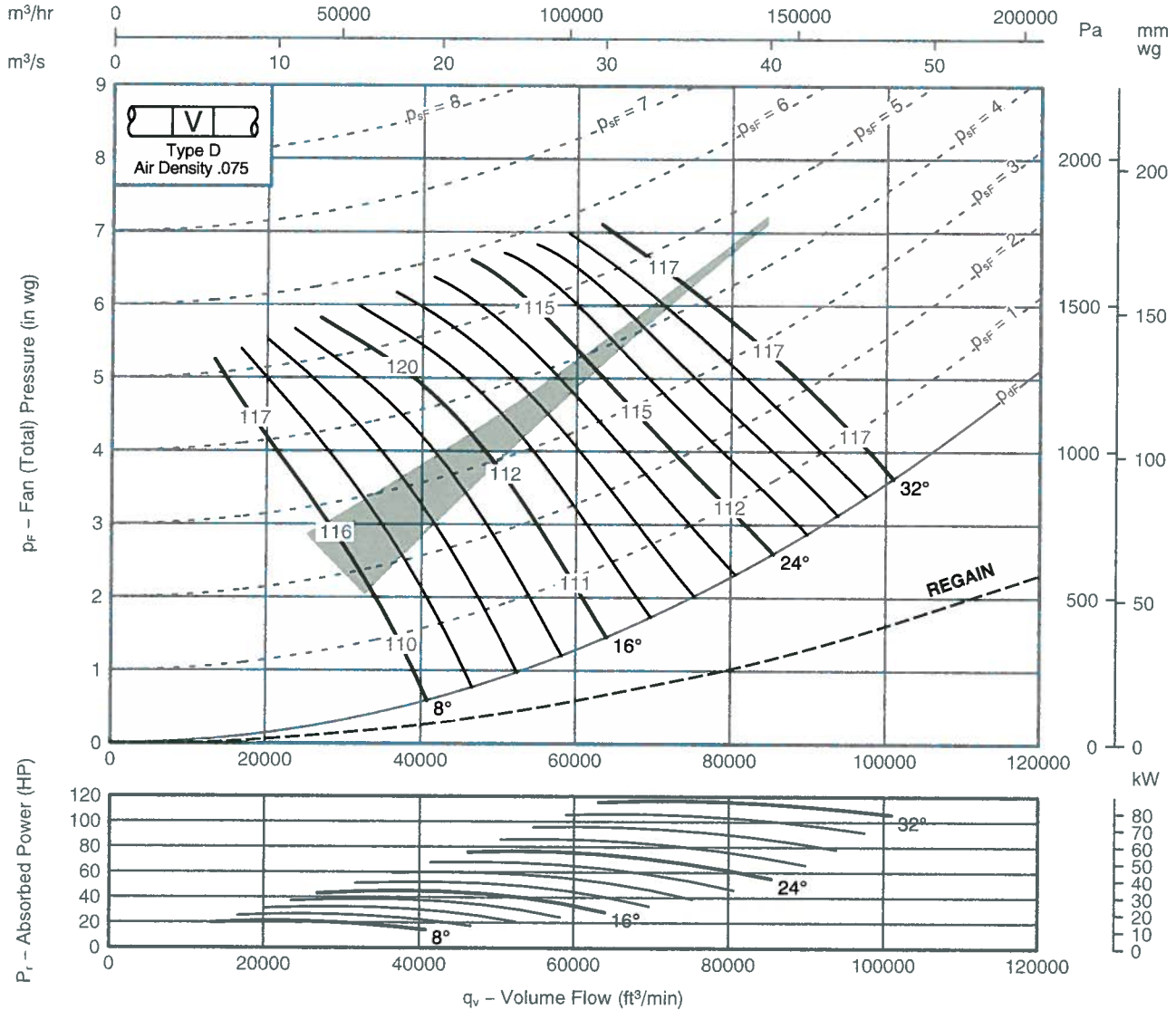
Fan Code: 125JM/50/4/6/...
 1250 mm 1770 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-19	-11	-10	-11	-3	-8	-17	-23
	-15	-8	-9	-8	-5	-8	-12	-14
16°	-18	-10	-10	-7	-4	-10	-16	-21
	-11	-5	-6	-7	-10	-11	-15	-18
24-32°	-9	-6	-7	-8	-9	-12	-14	-16
	-8	-6	-7	-8	-10	-11	-14	-16

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-10	-10	-11	-2	-7	-16	-22
	-13	-6	-8	-8	-4	-8	-11	-13
16°	-16	-9	-9	-6	-5	-10	-15	-21
	-9	-4	-6	-7	-11	-11	-14	-18
24-32°	-6	-5	-7	-7	-10	-11	-13	-16
	-5	-4	-7	-7	-11	-11	-13	-16

SK11524

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

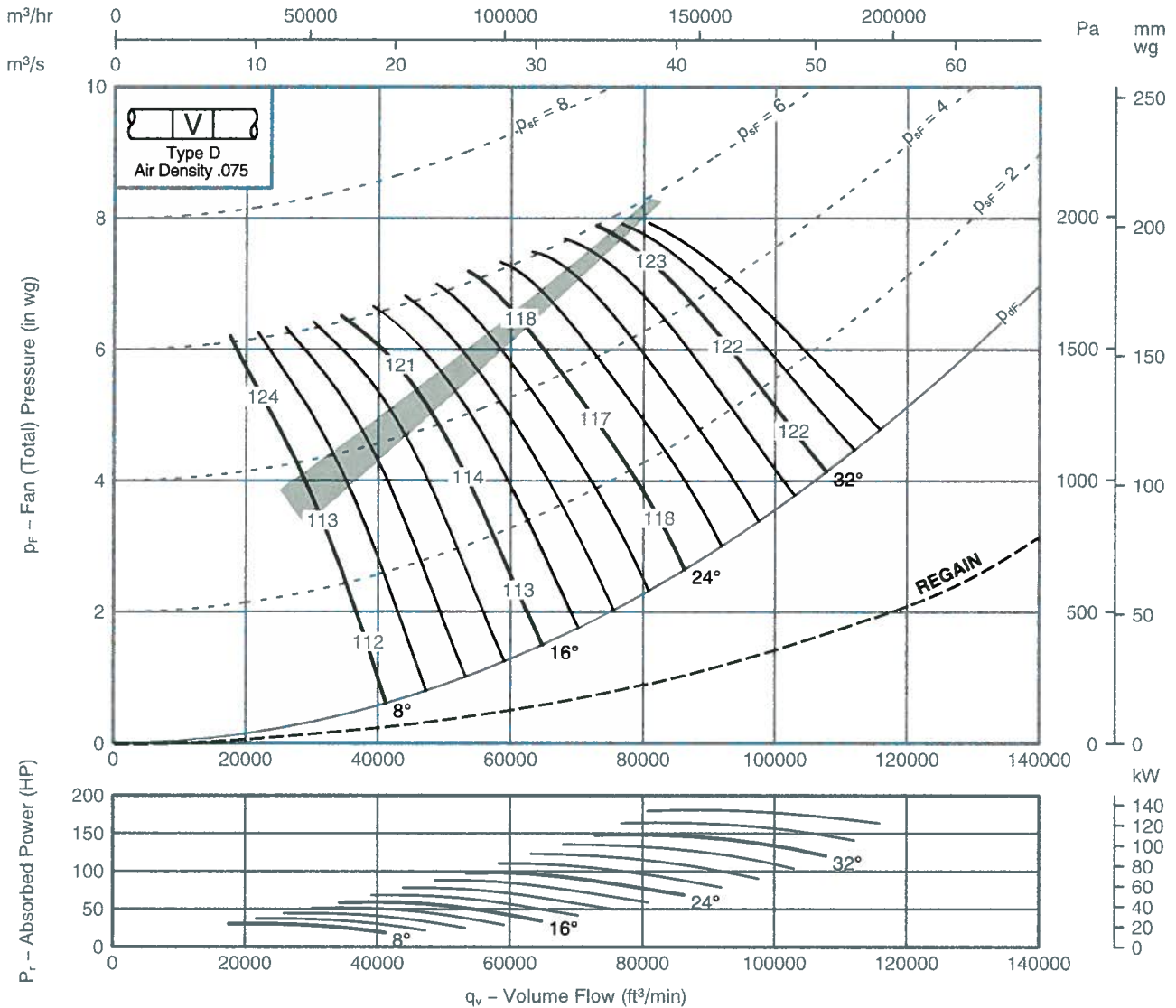
Fan Code: 125JM/50/4/9/...
 1250 mm 1770 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-21	-15	-11	-7	-3	-8	-15	-21
	-15	-11	-6	-9	-6	-8	-12	-14
16°	-18	-13	-7	-5	-5	-11	-17	-23
	-14	-10	-4	-7	-9	-11	-14	-16
24-36°	-9	-8	-7	-7	-9	-12	-16	-19
	-11	-8	-5	-6	-10	-12	-15	-19

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-18	-14	-9	-7	-3	-6	-14	-20
	-13	-10	-4	-8	-5	-6	-11	-13
16°	-15	-12	-5	-4	-5	-10	-16	-22
	-11	-9	-2	-7	-8	-10	-13	-15
24-36°	-6	-7	-5	-6	-8	-11	-15	-18
	-7	-7	-3	-5	-9	-11	-14	-17

SK11525

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

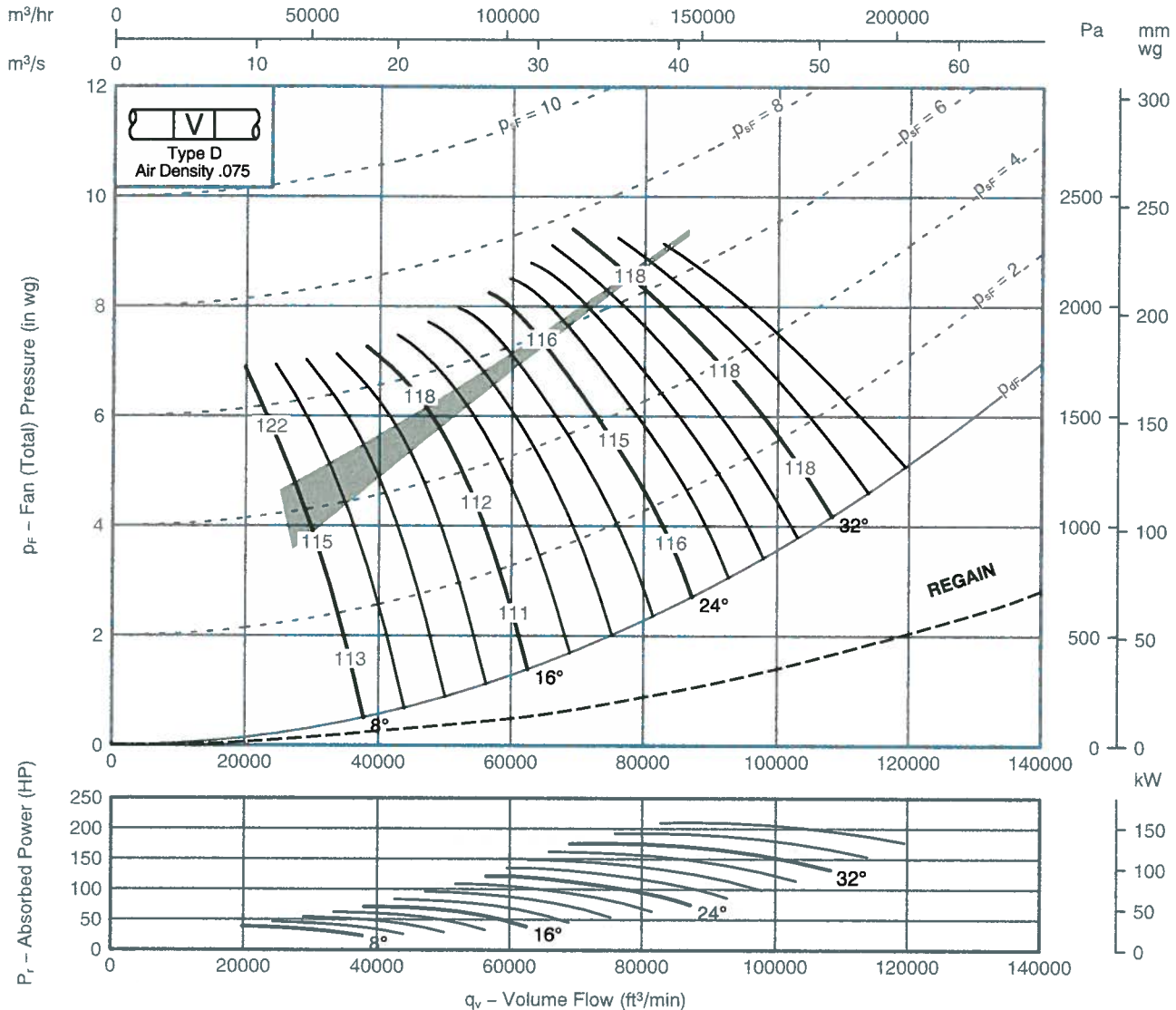
Fan Code: 125JM/50/4/12/...
 1250 mm 1770 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-19	-20	-8	-8	-4	-7	-14	-21
	-17	-17	-6	-8	-5	-8	-14	-18
16°	-15	-15	-9	-6	-5	-7	-15	-21
	-12	-12	-4	-9	-8	-9	-13	-18
24-36°	-9	-9	-7	-8	-8	-10	-14	-17
	-9	-8	-6	-9	-9	-10	-14	-17

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-16	-18	-6	-8	-3	-5	-12	-18
	-14	-15	-4	-8	-5	-6	-11	-16
16°	-12	-13	-7	-5	-5	-5	-11	-19
	-9	-10	-1	-8	-8	-8	-10	-15
24-36°	-6	-6	-6	-7	-8	-8	-11	-15
	-6	-6	-4	-8	-9	-8	-11	-14

SK11526

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-4	-1	0	0	0	0	0	0



JM AEROFOIL

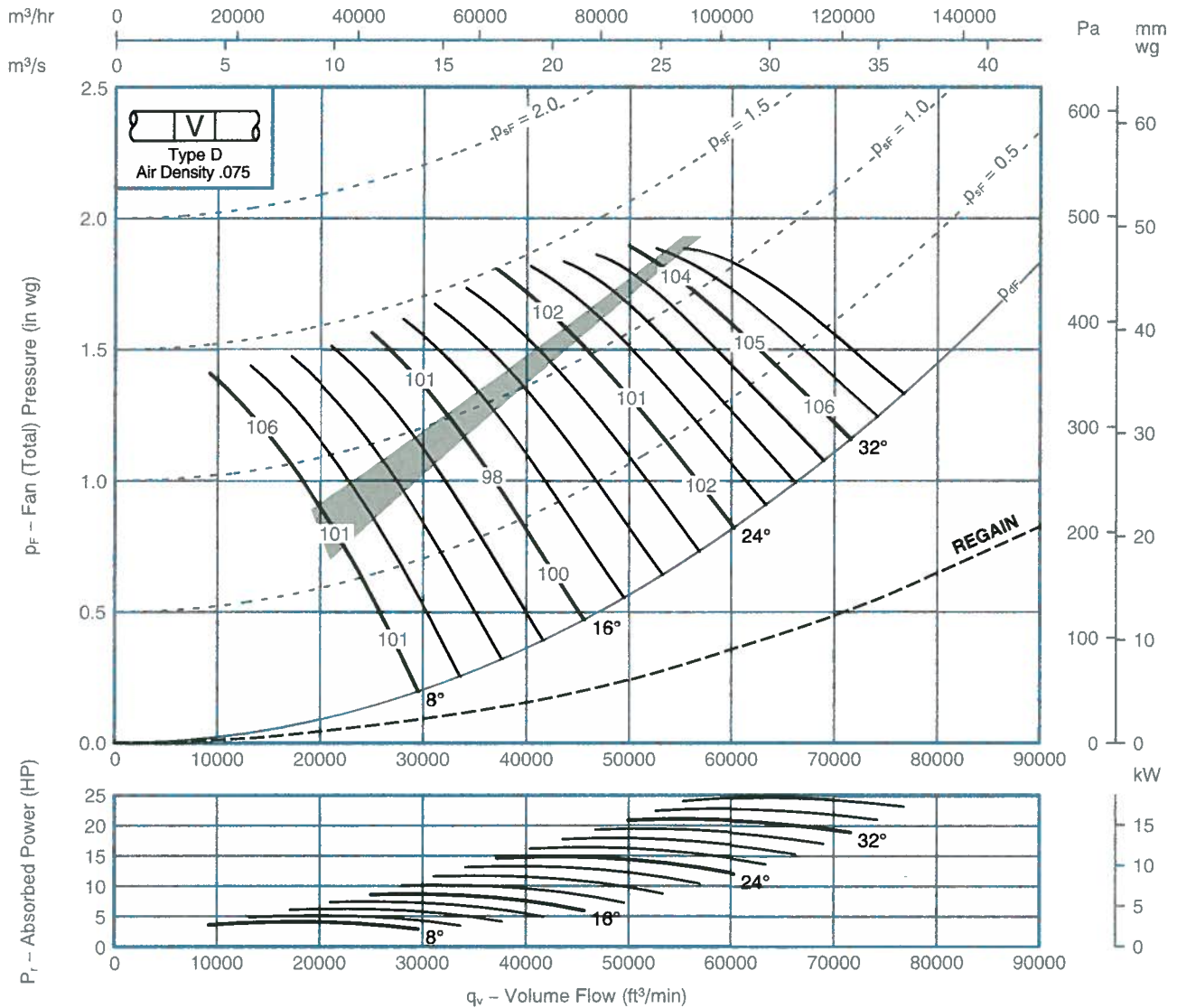
Fan Code: 140JM/40/8/6/...
 1400 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-17	-14	-10	-3	-6	-11	-14	-26
	Lower	-15	-12	-12	-7	-6	-6	-9	-24
16°	Upper	-14	-11	-10	-3	-8	-13	-18	-23
	Lower	-8	-7	-9	-9	-11	-9	-10	-21
24-36°	Upper	-8	-6	-8	-7	-9	-13	16	-17
	Lower	-6	-6	-8	-8	-11	-14	-15	-17

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-14	-12	-10	-2	-6	-9	-13	-25
	Lower	-12	-10	-11	-6	-5	-5	-8	-23
16°	Upper	-11	-9	-9	-3	-7	-13	-16	-22
	Lower	-4	-5	-8	-9	-11	-8	-9	-20
24-36°	Upper	-5	-5	-7	-6	-9	-12	-14	-16
	Lower	-3	-5	-6	-6	-11	-13	-13	-16

SK11527

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

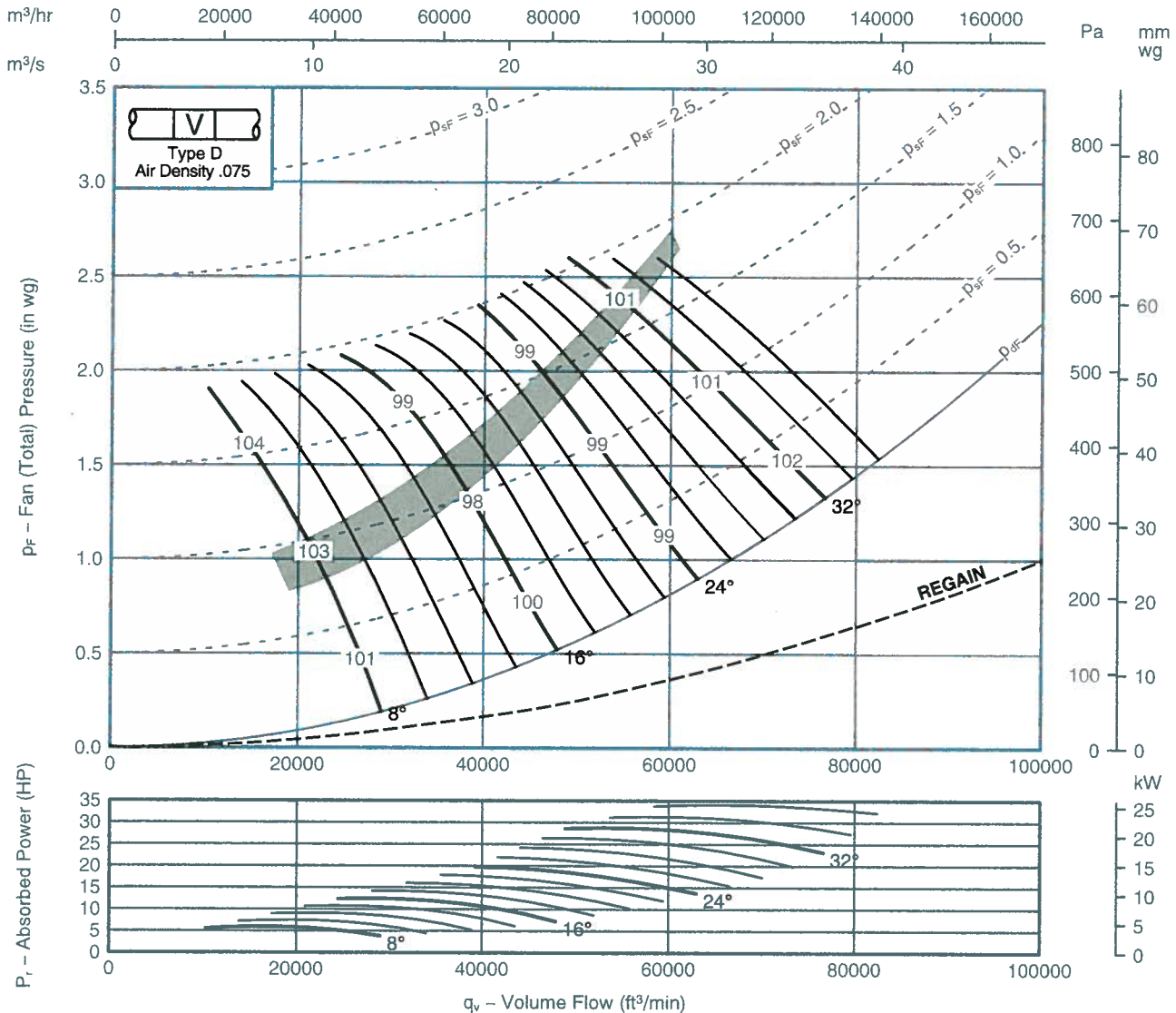
Fan Code: 140JM/40/8/9/...
 1400 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-18	-15	-11	-4	-6	-11	-16	-26
	-18	-14	-13	-8	-7	-5	-8	-22
16°	-7	-10	-10	-6	-8	-9	-12	-18
	-12	-10	-11	-9	-9	-5	-9	-20
24-36°	-7	-7	-9	-7	-9	-12	-15	-15
	-7	-7	-8	-7	-9	-11	-15	-17

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-12	-10	-2	-4	-9	-15	-25
	-15	-11	-12	-6	-5	-3	-8	-21
16°	-4	-7	-10	-6	-7	-9	-10	-17
	-8	-7	-9	-9	-7	-5	-9	-18
24-36°	-3	-4	-7	-7	-8	-11	-14	-14
	-3	-4	-6	-6	-8	-11	-13	-16

SK11528

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

Fan Code: 140JM/50/8/9/...

1400 mm 875 RPM

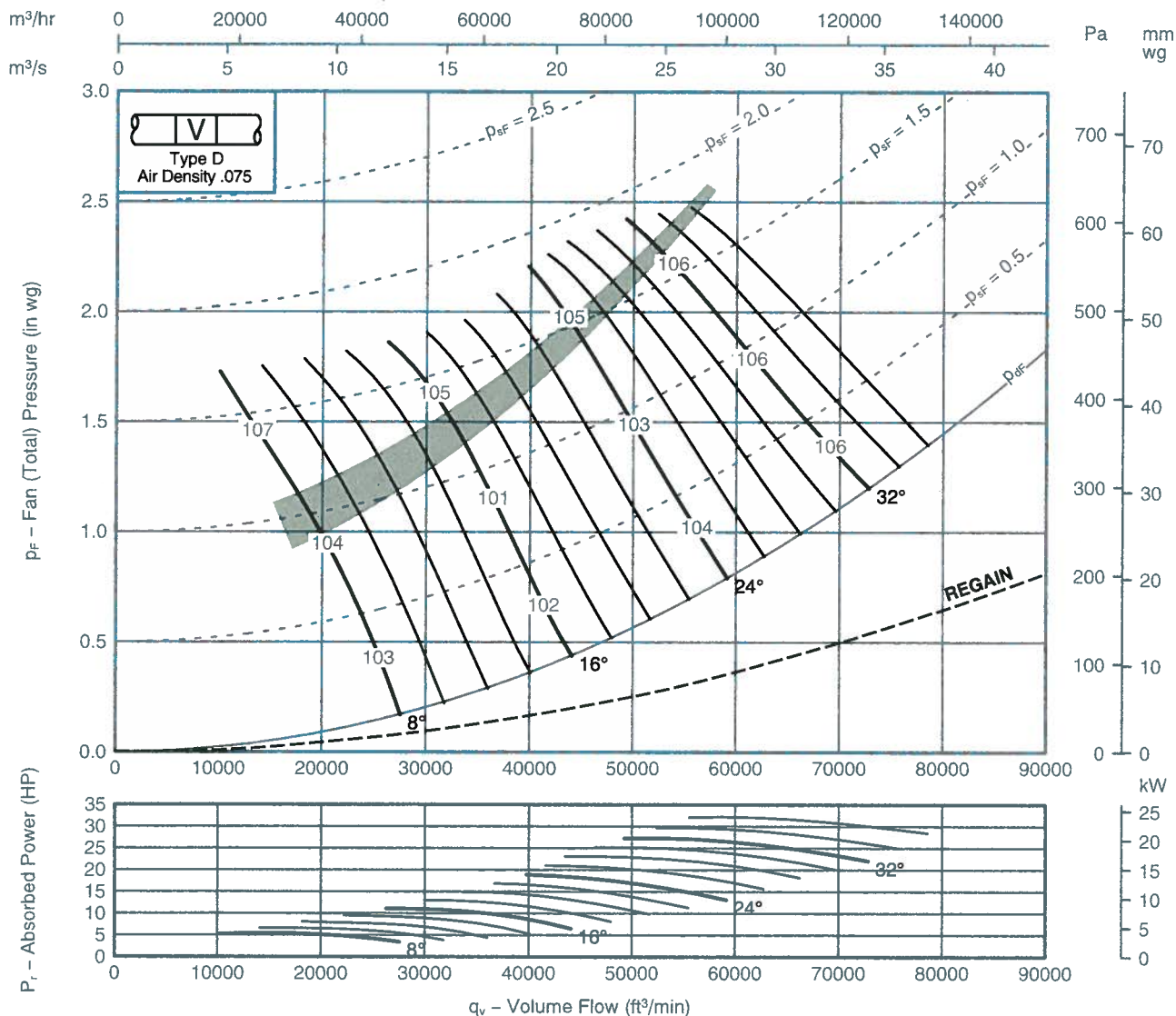
9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-16	-10	-9	-4	-7	-12	-17	-27
	Lower	-13	-10	-11	-5	-6	-8	-12	-25
16°	Upper	-13	-11	-7	-4	-8	-13	-19	-24
	Lower	-9	-6	-9	-8	-9	-9	-12	-20
24-36°	Upper	-7	-5	-9	-8	-11	-14	-16	-18
	Lower	-6	-5	-9	-9	-12	-14	-16	-19

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-13	-8	-8	-3	-6	-11	-16	-26
	Lower	-10	-7	-10	-5	-6	-7	-11	-23
16°	Upper	-10	-8	-6	-3	-7	-12	-17	-23
	Lower	-6	-4	-7	-7	-8	-7	-11	-19
24-36°	Upper	-4	-2	-8	-7	-10	-13	-15	-17
	Lower	-3	-2	-7	-7	-11	-12	-14	-18

SK11529

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

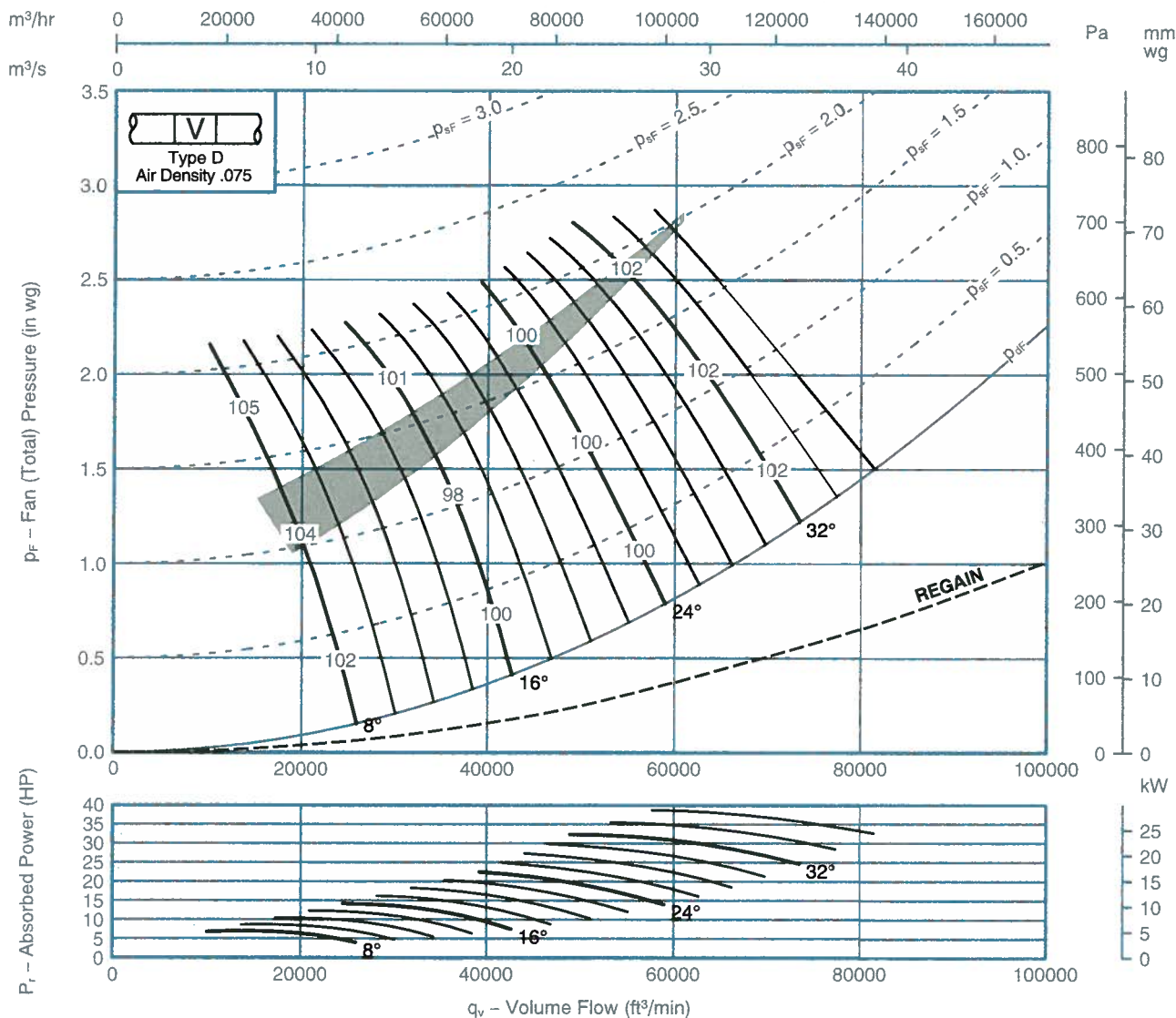
Fan Code: 140JM/50/8/12/...
 1400 mm 875 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-9	-10	-4	-6	-13	-19	-29
	-19	-13	-12	-6	-6	-7	-11	23
16°	-16	-13	-7	-3	-8	-15	-23	-27
	-11	-7	-12	-9	-8	-7	-11	-20
24-36°	-5	-6	-10	-8	-9	-13	-16	-16
	-7	-6	-10	-8	-9	-11	-15	-20

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-14	-7	-10	-3	-5	-11	-17	-27
	-16	-11	-6	-3	-7	-14	-20	-26
16°	-13	-11	-6	-3	-7	-14	-20	-26
	-7	-3	-11	-9	-8	-6	-7	-18
24-36°	-2	-3	-8	-7	-8	-13	-15	-16
	-3	-2	-8	-7	-8	-11	-14	-19

SK11530

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

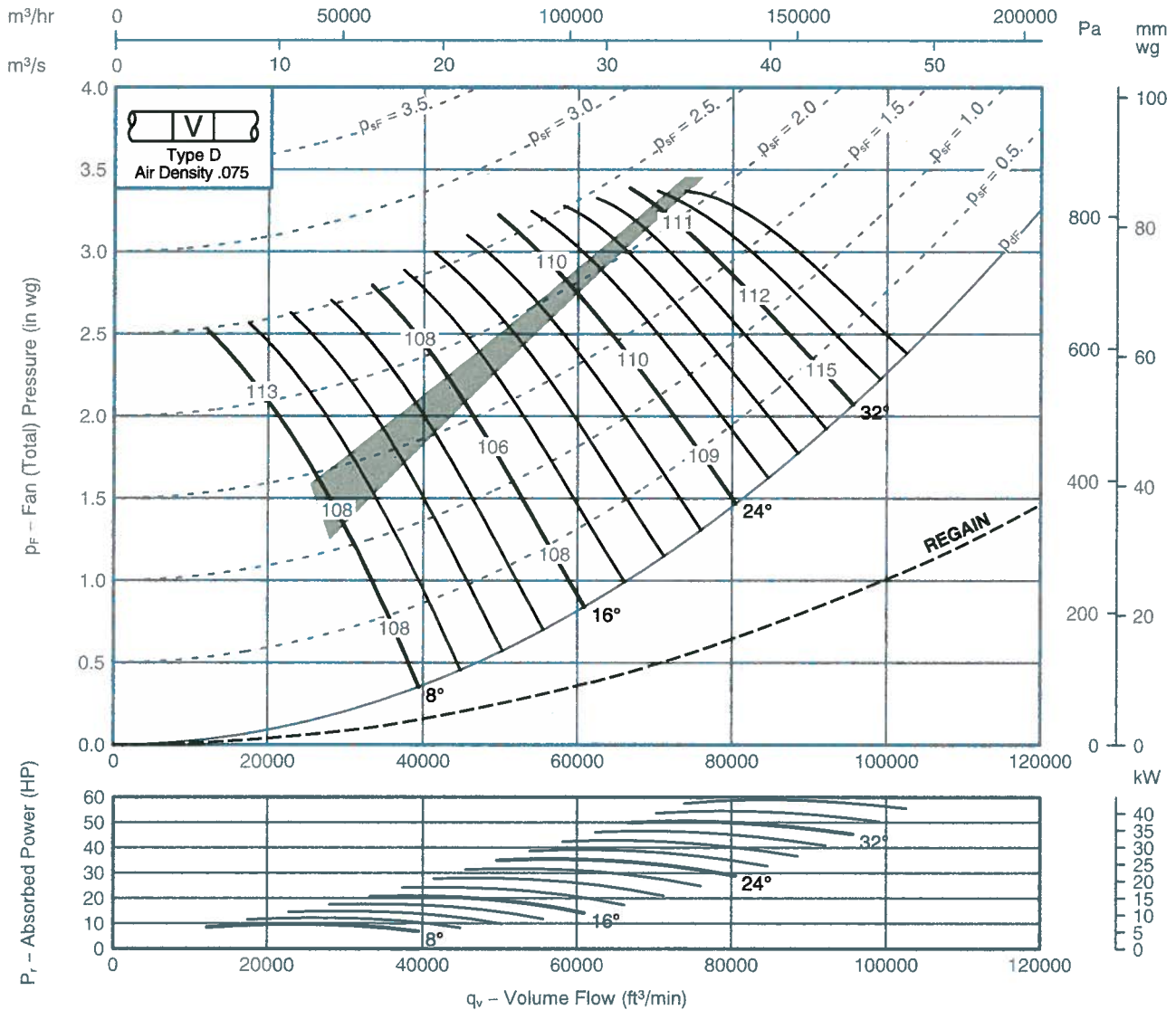
Fan Code: 140JM/40/6/6/...
 1400 mm 1170 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-16	-16	-12	-5	-4	-9	-11	-22
	Lower	-14	-14	-11	-9	-5	-7	-7	-19
16°	Upper	-12	-12	-11	-5	-5	-11	-16	-21
	Lower	-7	-8	-7	-9	-11	-10	-9	-18
24-36°	Upper	-7	-8	-7	-7	-8	-12	-15	-17
	Lower	-6	-7	-7	-8	-10	-13	-15	-17

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°	Upper	-13	-14	-12	-4	-4	-8	-10	-21
	Lower	-11	-12	-11	-8	-5	-6	-6	-18
16°	Upper	-10	-11	-10	-5	-4	-11	-14	-20
	Lower	-4	-6	-7	-9	-10	-10	-8	-17
24-36°	Upper	-5	-6	-6	-6	-8	-11	-13	-15
	Lower	-6	-6	-6	-7	-10	-12	-13	-16

SK11531

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

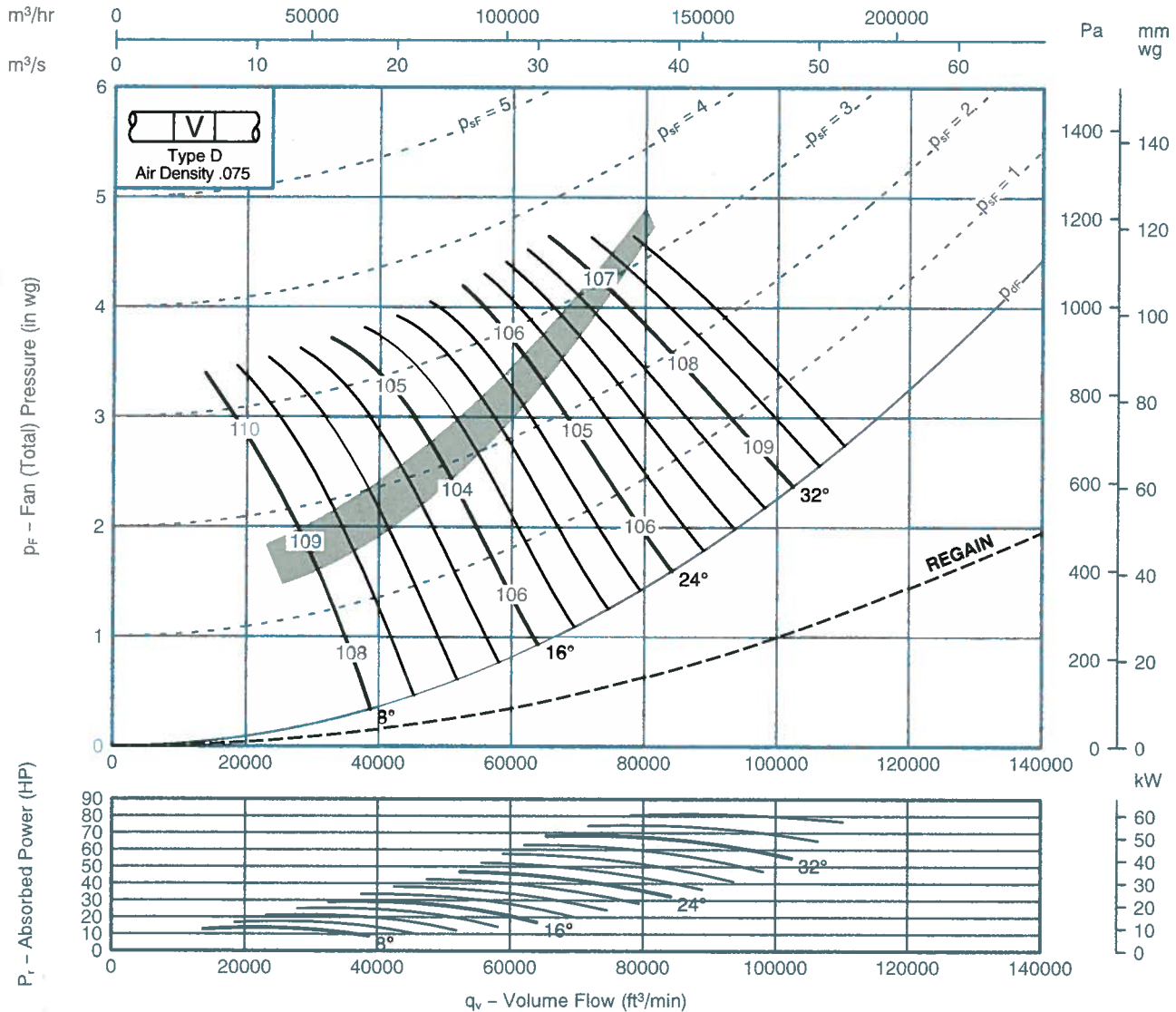
Fan Code: 140JM/40/6/9/...
 1400 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-19	-15	-12	-6	-4	-9	-12	-23
	-18	-14	-14	-9	-6	-6	-5	-18
16°	-7	-9	-12	-8	-7	-9	-10	-17
	-11	-9	-12	-9	-9	-7	-6	-17
24-36°	-6	-7	-10	-8	-8	-11	-15	-15
	-7	-7	-9	-7	-9	-11	-13	-17

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-16	-13	-12	-4	-3	-7	-12	-23
	-15	-11	-13	-8	-5	-5	-5	-17
16°	-3	-7	-11	-8	-6	-9	-8	-16
	-8	-7	-11	-9	-8	-6	-6	-15
24-36°	-2	-4	-8	-7	-8	-10	-13	-14
	-2	-3	-7	-6	-8	-10	-11	-16

SK11532

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

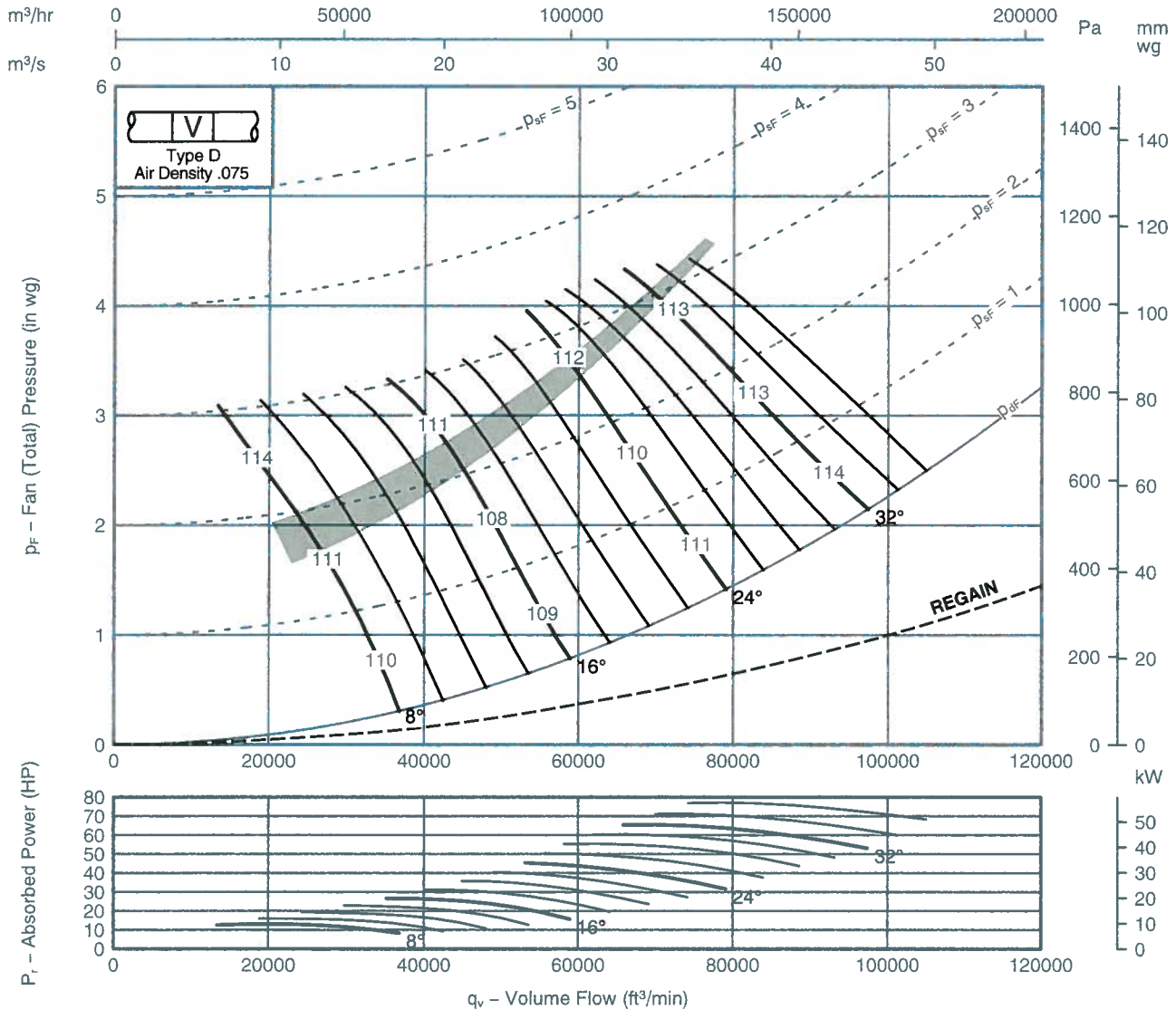
Fan Code: 140JM/50/6/9/...
 1400 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°		-16	-11	-10	-5	-5	-10	-14	-24
		-13	-11	-11	-7	-5	-8	-9	-20
16°		-13	-12	-10	-4	-6	-11	-16	-22
		-8	-8	-7	-9	-9	-9	-10	-18
24-36°		-7	-5	-7	-10	-12	-14	-15	-18
		-6	-5	-7	-10	-12	-14	-15	-18

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°		-13	-8	-9	-4	-4	-10	-13	-23
		-10	-8	-10	-7	-5	-7	-8	-18
16°		-10	-9	-8	-3	-5	-10	-14	-21
		-5	-5	-5	-7	-8	-7	-8	-17
24-36°		-4	-3	-6	-8	-9	-12	-15	-16
		-4	-3	-5	-8	-11	-13	-14	-17

SK11533

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

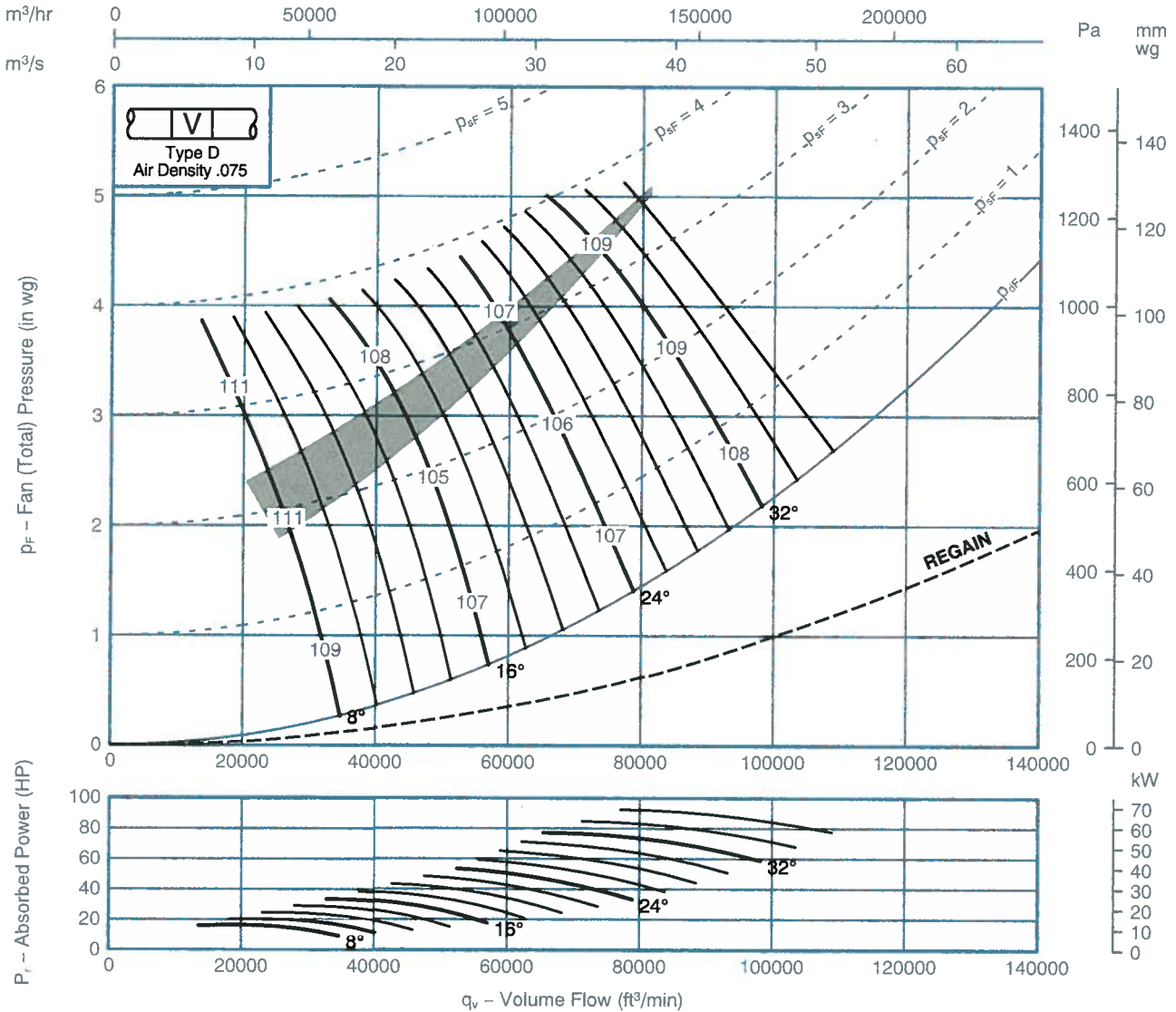
Fan Code: 140JM/50/6/12/...
 1400 mm 1170 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-17	-13	-8	-5	-5	-10	-16	-27
	-19	-15	-12	-8	-5	-7	-8	-20
16°	-15	-16	-10	-3	-5	-11	-19	-26
	-10	-12	-6	-10	-8	-8	-8	-18
24-36°	-5	-8	-7	-10	-9	-12	-16	-17
	-6	-9	-6	-9	-9	-11	-13	-19

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-15	-12	-6	-5	-4	-8	-14	-25
	-16	-15	-10	-7	-3	-4	-6	-18
16°	-12	-14	-8	-3	-4	-11	-17	-25
	-6	-10	-4	-9	-8	-7	-5	-16
24-36°	-2	-5	-5	-9	-8	-12	-15	-17
	-3	-6	-4	-8	-8	-11	-12	-18

SK11534

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

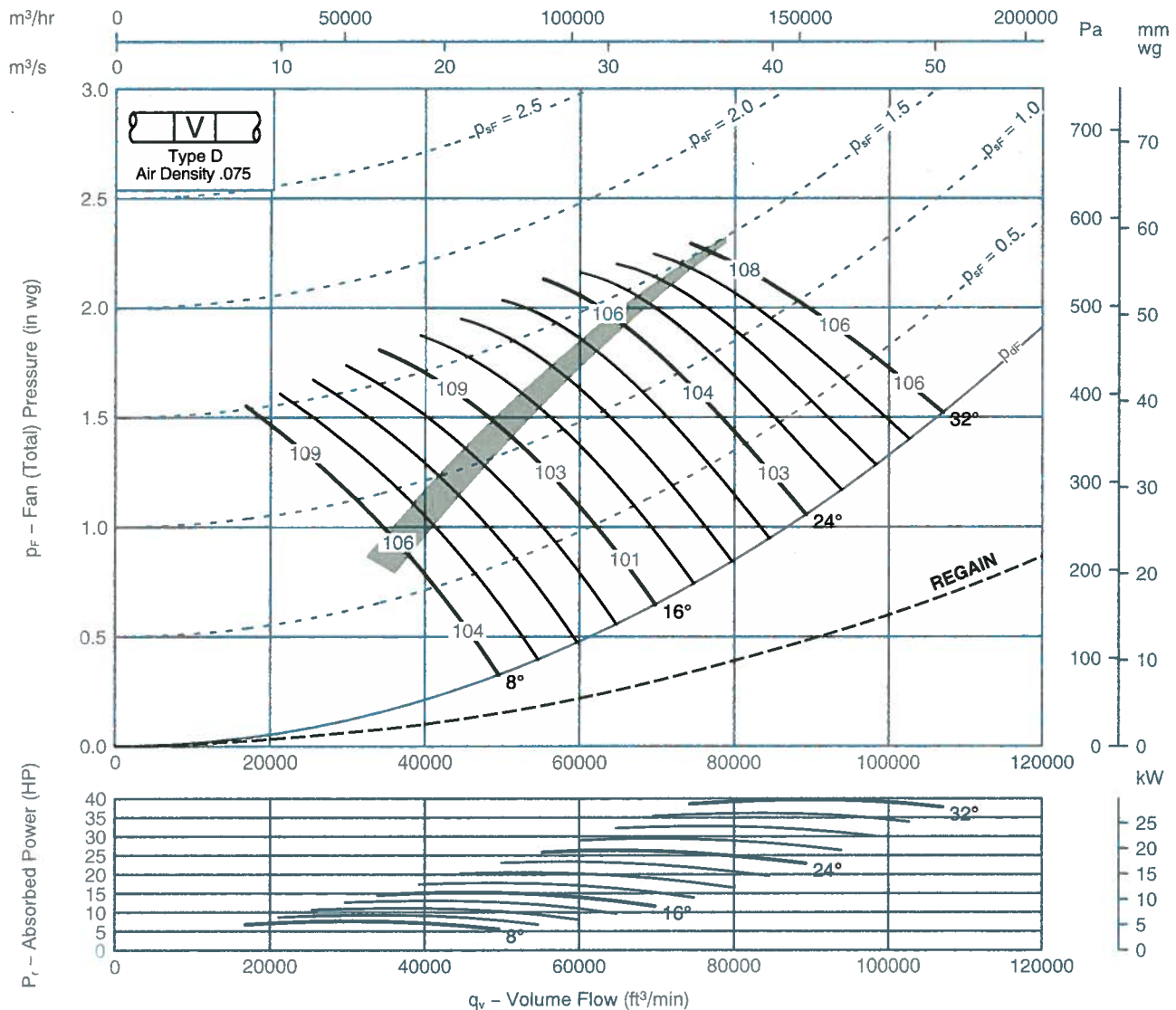
Fan Code: 160JM/40/8/6/...
 1600 mm 875 RPM
 6 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°		-20	-14	-7	-4	-8	-14	-17	-24
		-17	-14	-13	-7	-4	-7	-9	-21
16°		-15	-14	-11	-4	-5	-9	-13	-16
		-11	-9	-10	-8	-7	-8	-9	-14
24-32°		-13	-8	-7	-6	-9	-14	-17	19
		-9	-8	-9	-8	-8	-10	-12	-13

Outlet Levels		Octave Band Center Frequency (Hz)							
Pitch Angle		63	125	250	500	1k	2k	4k	8k
8°		-16	-12	-6	-3	-7	-12	-16	-23
		-14	-12	-12	-6	-4	-6	-8	-19
16°		-12	-13	-11	-4	-5	-9	-11	-15
		-8	-8	-9	-7	-7	-8	-8	-13
24-32°		-10	-7	-6	-4	-8	-12	-15	-17
		-6	-6	-7	-6	-8	-9	-10	-11

SK11535

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

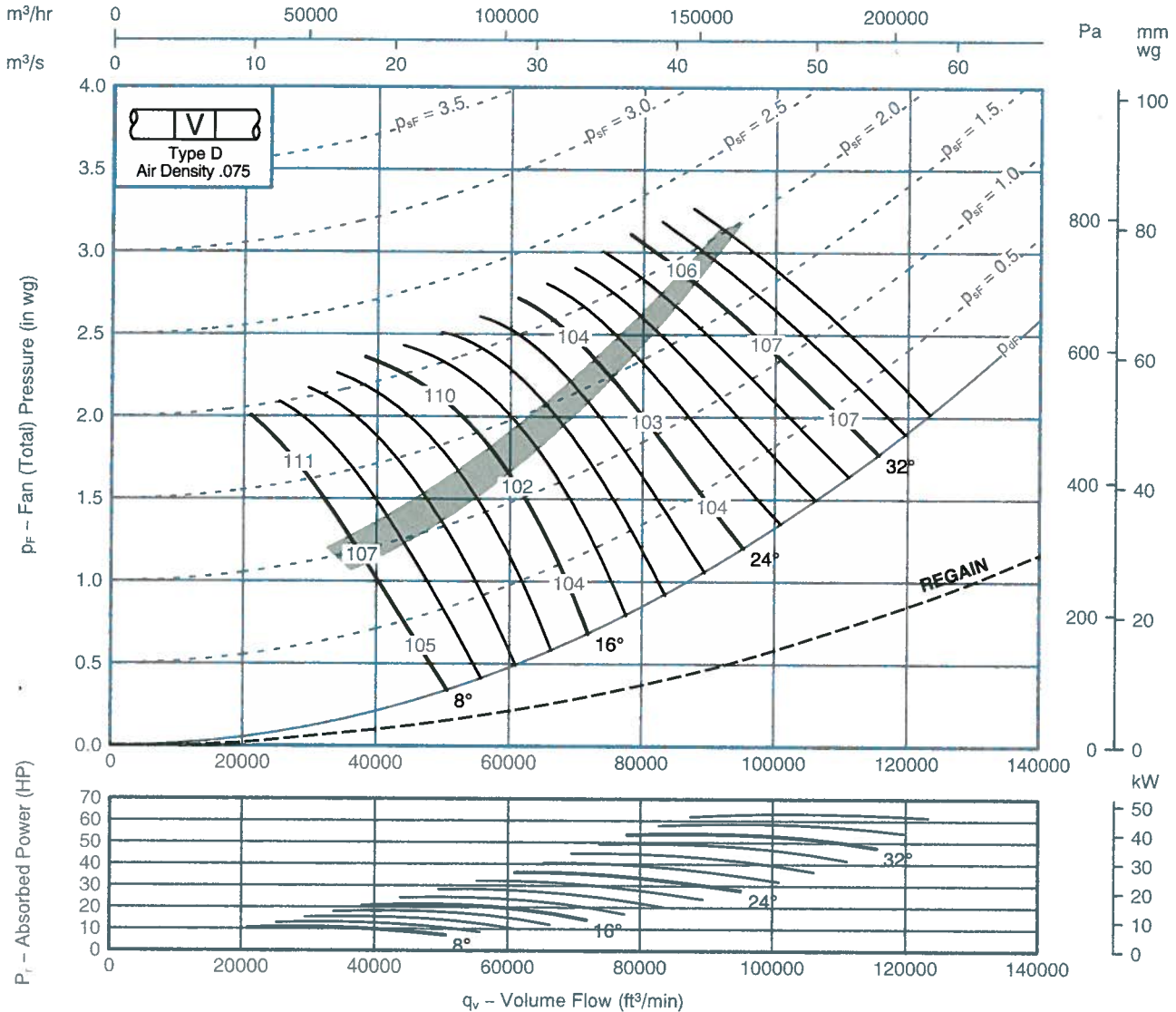
Fan Code: 160JM/40/8/9/...
 1600 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-23	-17	-9	-3	-7	-15	-17	-27
	-20	-14	-14	-6	-5	-7	-9	-21
16°	-19	-16	-9	-3	-7	-13	-17	-22
	-13	-7	-11	-10	-9	-7	-7	-16
24-36°	-9	-10	-10	-7	-7	-9	-12	-12
	-8	-8	-9	-8	-8	-9	-12	-13

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-20	-14	-8	-1	-6	-13	-17	-26
	-17	-11	-13	-5	-3	-6	-9	-20
16°	-15	-14	-9	-3	-6	-12	-15	-20
	-9	-4	-9	-10	-8	-7	-7	-14
24-36°	-5	-7	-8	-7	-6	-8	-10	-11
	-4	-4	-7	-7	-7	-9	-9	-12

SK11536

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

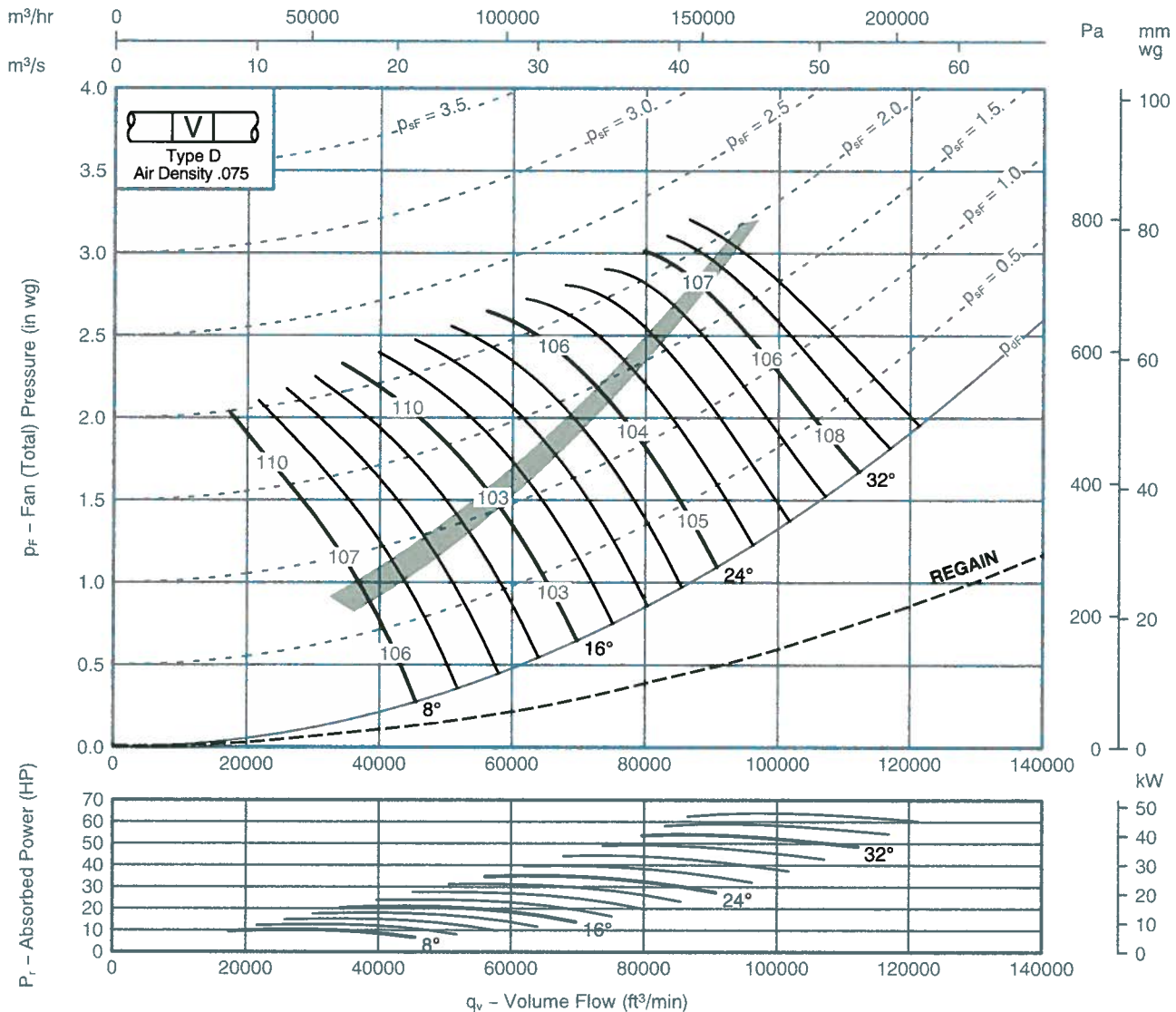
Fan Code: 160JM/50/8/9/...
 1600 mm 875 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-19	-12	-7	-4	-7	-13	-15	-25
	-19	-16	-13	-7	-5	-7	-8	-23
16°	-18	-12	-6	-4	-8	-14	-19	-23
	-11	-9	-10	9	-8	-7	-8	-18
24-36°	-11	-9	-8	-5	-7	-11	-15	-16
	-8	-7	-9	-8	-9	-10	-12	-14

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-16	-9	-6	-3	-6	-11	-14	-23
	-16	-12	-13	-6	-4	-6	-7	-21
16°	-14	-9	-5	-3	-7	-13	-17	-22
	-8	-6	-8	-7	-7	-5	-7	-17
24-36°	-9	-7	-7	-4	-6	-10	-14	-15
	-6	-4	-7	-7	-8	-9	-11	-13

SK11537

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

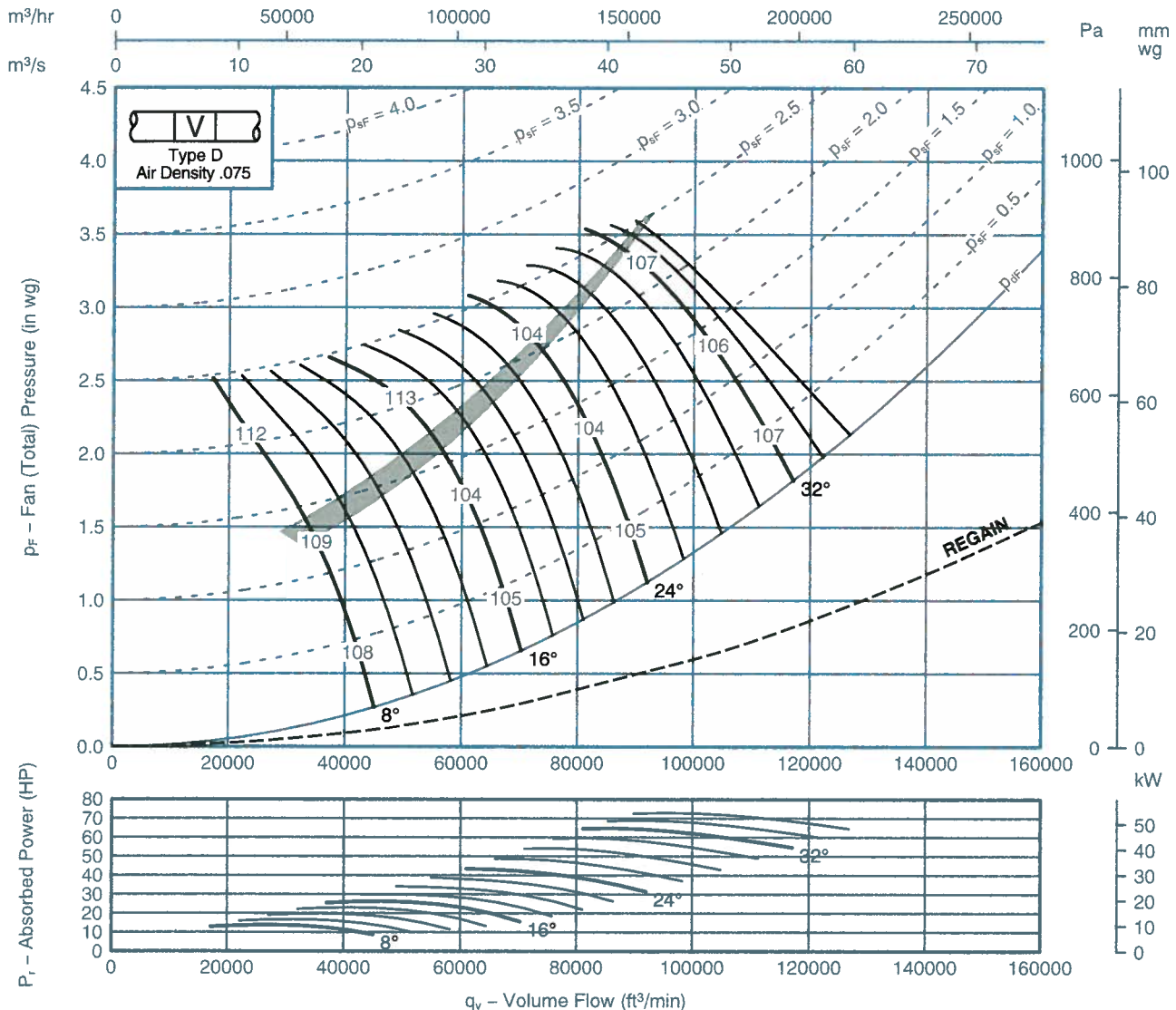
Fan Code: 160JM/50/8/12/...
 1600 mm 875 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-22	-13	-8	-2	-9	-14	-17	-27
	-22	-15	-14	-5	-5	-8	-10	-24
16°	-17	-15	-12	-4	-5	-10	-13	-21
	-13	-10	-13	-9	-7	-6	-6	-17
24-36°	-10	-11	-8	-6	-7	-10	-14	-15
	-7	-8	-10	-8	-8	-9	-11	-15

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-20	-10	-8	-2	-8	-12	-15	-26
	-19	-13	-13	-5	-3	-5	-7	-22
16°	-14	-12	-11	-4	-4	-9	-11	-20
	-10	-7	-12	-10	-7	-5	-3	-14
24-36°	-7	-7	-6	-5	-6	-10	-12	-14
	-3	-4	-8	-7	-7	-9	-10	-14

SK11538

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

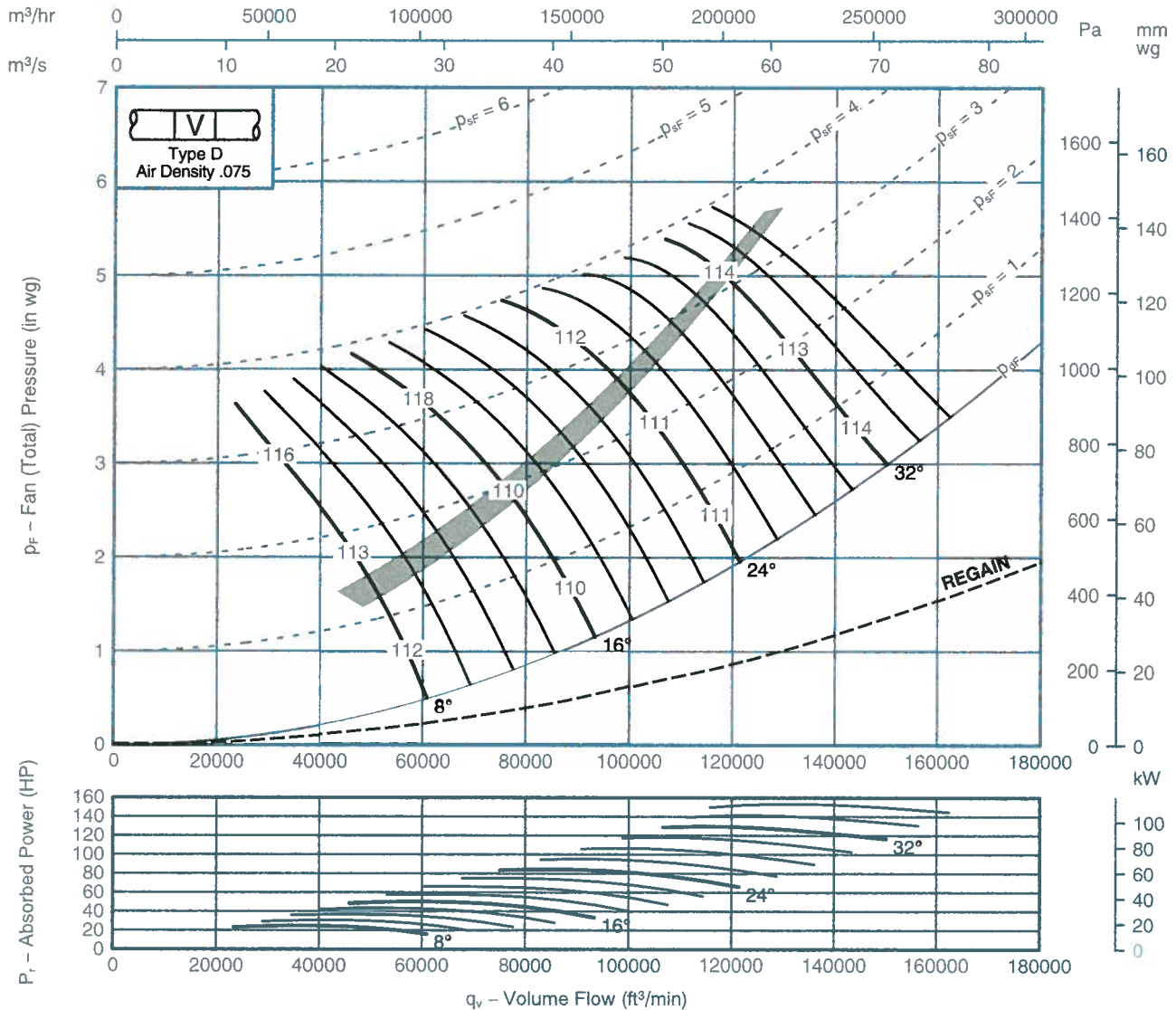
Fan Code: 160JM/50/6/9/...
 1600 mm 1170 RPM
 9 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-19	-14	-9	-4	-5	-10	-13	-21
	-19	-17	-14	-10	-5	-6	-6	-17
16°	-17	-14	-8	-4	-6	-11	-16	-21
	-11	-11	9	-9	-8	-7	-6	-15
24-36°	-11	-12	-8	-5	-7	-9	-14	-15
	-8	-9	-7	-8	-9	-9	-11	-13

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-16	-11	-8	-3	-5	-9	-13	-20
	-16	-14	-13	-9	-4	-5	-5	-15
16°	-14	-12	-7	-3	-5	-10	-15	-20
	-8	-8	-7	-8	-8	-6	-5	-14
24-36°	-8	-9	-7	-5	-6	-8	-13	-14
	-5	-7	-5	-7	-8	-8	-10	-12

SK11539

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0



JM AEROFOIL

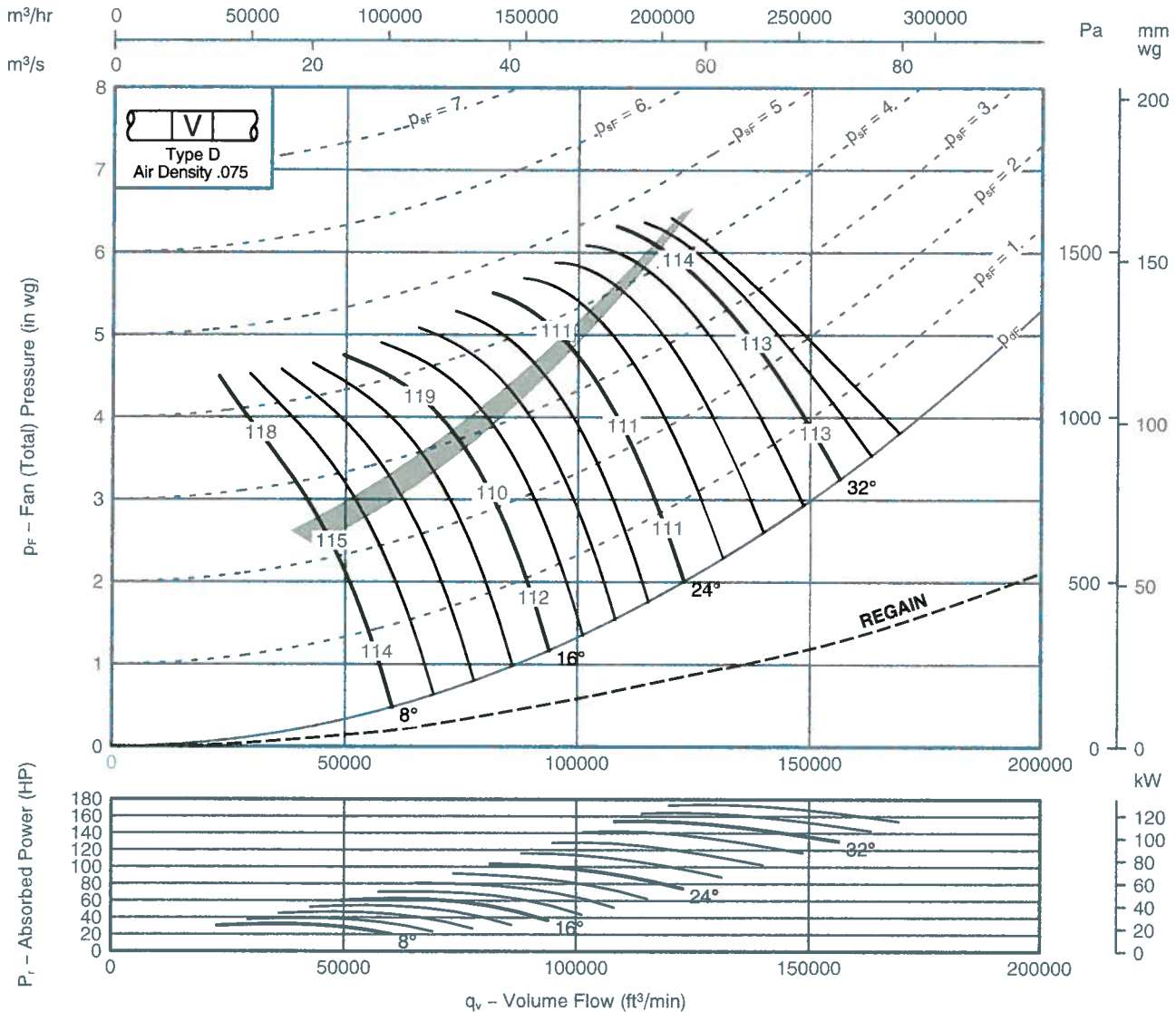
Fan Code: 160JM/50/6/12/...
 1600 mm 1170 RPM
 12 Blades 60 Hz



2933 Symmes Road, Fairfield, Ohio 45014
 PH: (513) 874-2400 FAX: (513) 870-6249

Performance shown is for installation type D - Ducted 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 Data: single figures on performance curves are overall inlet sound power levels, derived from measurements taken in Woods laboratory specifically under ducted conditions. For sound power levels in eight octave bands, apply the following corrections to the overall level. Use upper corrections when operating point is above shaded area, or lower corrections when operating point is below shaded area.

Inlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-23	-16	-10	-3	-5	-12	-15	-24
	-22	-19	-14	-8	-4	-7	-12	-18
16°	-16	-18	-13	-6	-4	-7	-12	-18
	-12	-15	-9	-11	-8	-7	-5	-13
24-36°	-9	-12	-9	-7	-7	-9	-12	-14
	-7	-10	-8	-9	-9	-9	-11	-14

Outlet Levels								
Pitch Angle	Octave Band Center Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
8°	-20	-15	-8	-3	-4	-10	-13	-22
	-19	-18	-11	-7	-13	-4	-5	-16
16°	-13	-16	-11	-6	-3	-7	-9	-17
	-9	-13	-7	-11	-7	-6	-2	-10
24-36°	-6	-9	-7	-6	-6	-8	-11	-13
	-3	-6	-5	-8	-8	-9	-9	-13

SK11540

End Reflection Correction (dB)							
63	125	250	500	1k	2k	4k	8k
-3	-1	0	0	0	0	0	0

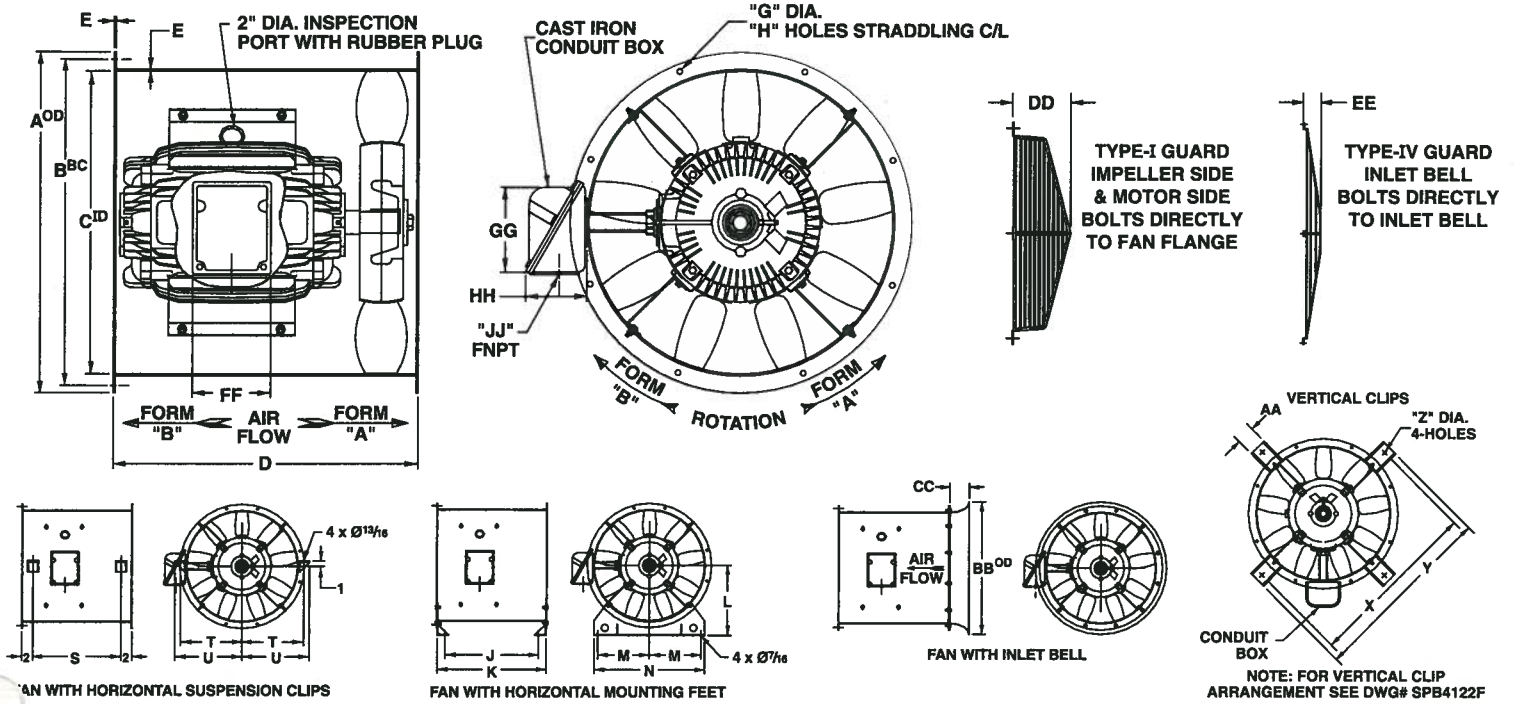
JM AEROFOIL

Fan sizes 31 through 45
Direct Drive with Pad Mounted Motors



2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

FRAME SIZES 140P THROUGH 210P HAVE SEALED, NON-RELUBRICABLE BEARINGS.



FAN SIZE	FRAME SIZE	HUB DIA.	FAN								MOUNTING FEET					HORIZONTAL CLIPS			VERTICAL CLIPS			INLET BELL		GUARDS		APPROX. FAN WT. NO MOTOR	MOTOR WEIGHT LBS	FF	GG	HH	JJ
			A	B	C	D	E	G	H	J	K	L	M	N	S	T	U	X	Y	Z	AA	BB	CC	DD	EE						
31	140P	6.3	15 1/2	14	12 1/2	16	.105	7/8	8	12 1/4	15 1/4	7 1/2	5 1/4	12 1/2	12	7 1/2	8 1/2	17	19	3/8	2	14 1/2	2 1/2	5 1/2	1 1/2	38	50	4 3/8	6 1/2	3 1/4	3/4
35	140P	6.3/8.0	16 1/2	15 1/2	13 3/4	16	.105	7/8	8	12 1/4	15 1/4	8 1/2	6	14	12	8 1/2	9 1/2	19	21	3/8	2	16 1/2	3 1/2	5 1/2	1 1/2	47	50	4 3/8	6 1/2	3 1/4	3/4
	180P	8.0																									85				
40	140P	6.3/8.0	19 1/2	17 1/4	15 1/4	16	.105	1/2	8	12 1/4	15 1/4	9 1/2	6 1/2	15 1/4	12	9 1/2	10 1/2	21	23	3/8	2	18 1/2	3 3/4	5 1/2	1 1/2	67	50	4 3/8	6 1/2	3 1/4	3/4
	180P	8.0/10.0																									85				
	210P	10.0																									73				
45	140P	6.3/8.0	21 1/2	19 1/2	17 3/4	16	.105	1/2	8	12 1/4	15 1/4	11	7 1/2	17 1/4	12	10	11	24	26	1/2	3	21 1/2	3 3/4	5 1/2	1 1/2	73	50	4 3/8	6 1/2	3 1/4	3/4
	180P	8.0/10.0																									85				
	210P	10.0																									83				
▼ METRIC UNITS (mm) ▼																															
31	140P	160	385	355	315	406	2.5	11.1	8	324	400	200	133	318	305	186	211	432	483	11.1	51	379	65	137	30	17	22.7	122	165	83	SEE INCH DIMENSIONS
35	140P	160/200	425	395	355	406	2.5	11.1	8	324	400	225	152	356	305	206	232	483	533	11.1	51	423	85	137	30	21	22.7	122	165	83	
	180P	200																									38.6				
40	140P	160/200	495	450	400	406	2.5	12.7	8	321	397	250	175	400	305	230	256	533	584	11.1	51	480	80	137	30	30	22.7	122	165	83	
	180P	200/250																									38.6				
	210P	250																									495				
45	140P	160/200	545	500	450	406	2.5	12.7	8	321	397	280	200	451	305	254	279	610	660	12.7	76	536	95	137	30	33	22.7	122	165	83	
	180P	200/250																									38.6				
	210P	250																									545				

JM AEROFOIL

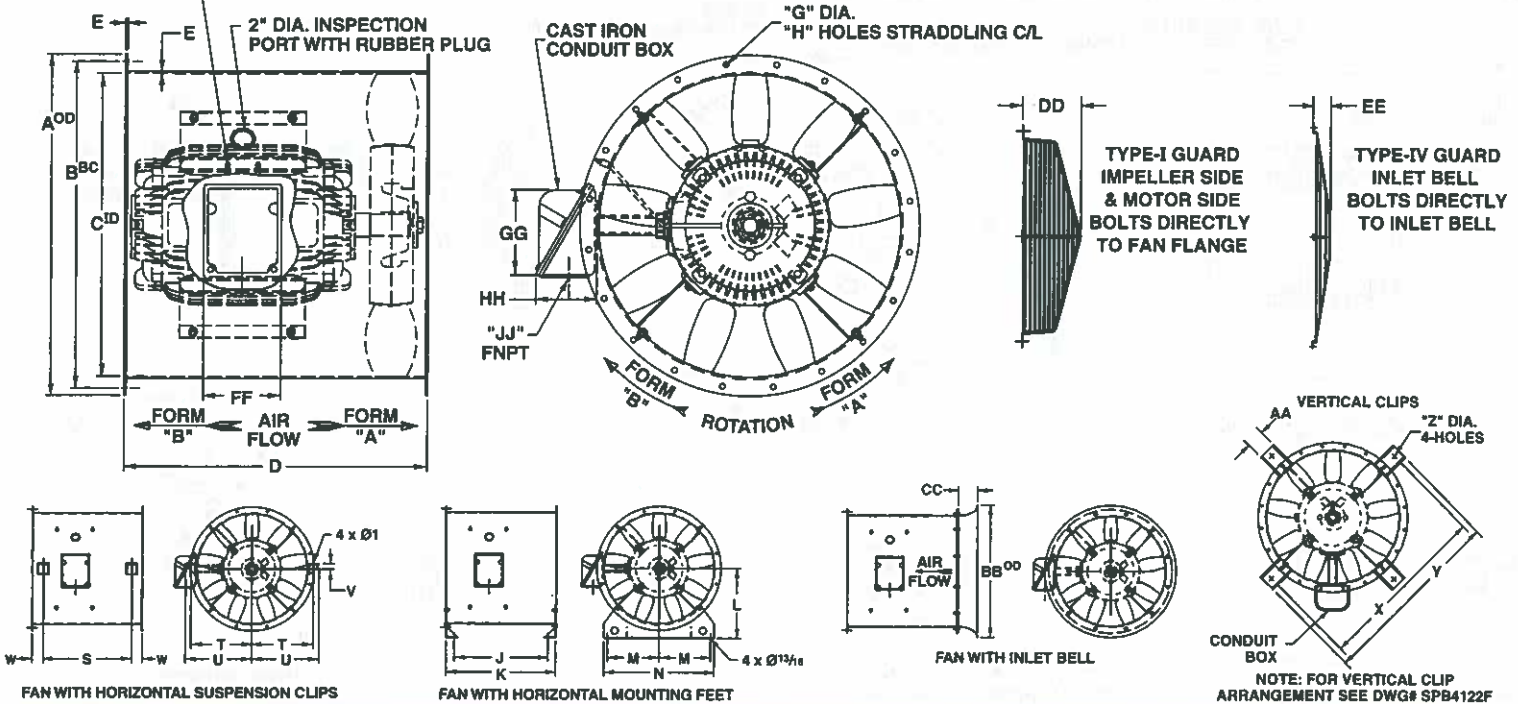
Fan sizes 140 & 160
with Pad Mounted Motors

**AMERICAN
FAN
COMPANY®**

WOODS
U.S.A. DIVISION

2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

EXTERNAL MOTOR BEARING GREASE FITTINGS SUPPLIED ON
FRAME SIZES 280P AND LARGER, FRAME SIZES 250P AND
SMALLER HAVE SEALED, NON-RELUBRICABLE BEARINGS.



FAN SIZE	FRAME SIZE	Hub DIA.	FAN								MOUNTING FEET					HORIZONTAL CLIPS					VERTICAL CLIPS			INLET BELL		GUARDS		APPROX. FAN WT. NO MOTOR	MOTOR WEIGHT LBS	FF	GG	HH	JJ																						
			A	B	C	D	E	G	H	J	K	L	M	N	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE																												
140	250P	12.5/16.0				30							24½	29½																		755	380	5%	7%	4%	1%																		
	280P																																																						
	320P	16.0/20.0	61%	57%	55%	33	¼	¾	20	27½	32½	35%	25%	55%	25	29%	31%	2	4	68	71	¾	5	66%	9%	6%	2%				825	560	7%	10	6	2																			
	360P																															800	800				3																		
	400P	20.0				38				32½	37½				30																	960	1170	10%	15%	8%	3																		
440P					50				44½	49½				42																	1712	2300																							
160	250P	12.5/16.0				30							23%	29%																																									
	280P																																																						
	320P	16.0/20.0	69	66%	63	33	¼	¾	24	26%	32½	38%	29%	63	25	33%	35%	2	4	76	79	¾	5	75%	10%	6%	2%				965	560	7%	10	6	2																			
	360P																															800	800				3																		
	400P	20.0				38				31%	37½				30																	1115	1170	10%	15%	8%	3																		
440P					50				43%	49½				42																	2055	2300																							
Y METRIC UNITS (mm) Y																												(kg)																											
140	250P	315/400				762							622	749																																									
	280P																																																						
	320P	400/500	1553	1470	1400	838	6.4	17.5	20	699	826	900	649	1400	635	757	808	51	102	1727	1803	191	127	1691	249	157	60				374	252	197	254	152	A																			
	360P																															363	363																						
	400P	500				965				826	953				762																435	531	260	394	216																				
440P					1270				1130	1257				1067																776	1043																								
160	250P	315/400				762							603	749																																									
	280P																																																						
	320P	400/500	1753	1680	1600	838	6.4	17.5	24	679	826	968	749	1600	635	857	908	51	102	1930	2007	19.1	127	1911	273	157	60				438	252	197	254	152																				
	360P																															363	363																						
	400P	500				965				806	953				762																506	531	260	394	216																				
440P					1270				1111	1257				1067																932	1043																								



www.amfan-woods.com

API/3.1M/6/99006

U.S. Sales office and factory:
2933 Symmes Road
Fairfield, Ohio 45014
Phone: 513-874-2400
Fax: 513-870-6249

Canadian Sales office:
Woods Air Movement, LTD.
401 Traders Blvd. East, Unit 8
Mississauga, Ontario L4Z 2H8
Phone: 905-501-0211
Fax: 905-501-0399

Represented by:

Litho in U.S.A.

JM AEROFOIL

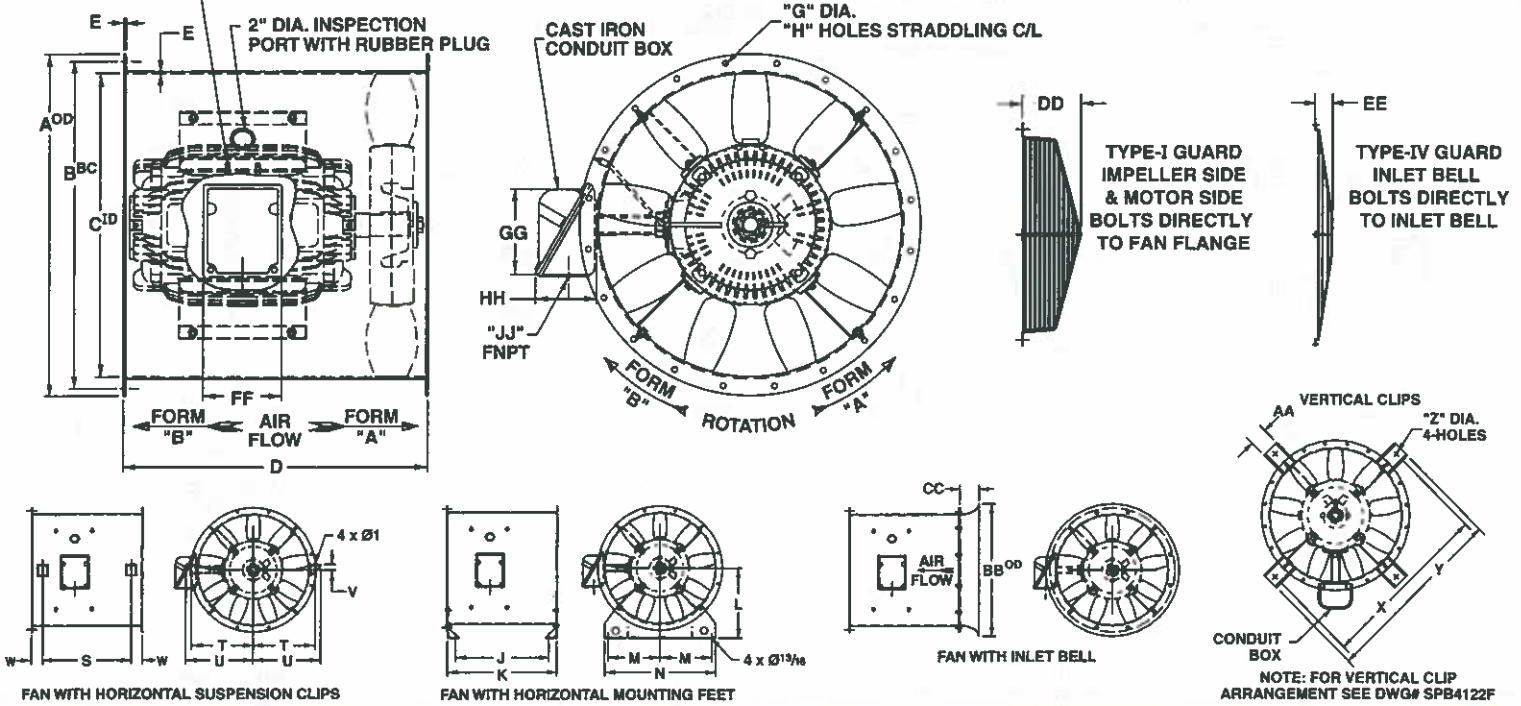
Fan sizes 140 & 160
with Pad Mounted Motors

AMERICAN FAN COMPANY

WOODS
U.S.A. DIVISION

2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

EXTERNAL MOTOR BEARING GREASE FITTINGS SUPPLIED ON FRAME SIZES 280P AND LARGER, FRAME SIZES 250P AND SMALLER HAVE SEALED, NON-RELUBRICABLE BEARINGS.



FAN SIZE	FRAME SIZE	Hub DIA.	FAN								MOUNTING FEET					HORIZONTAL CLIPS					VERTICAL CLIPS			INLET BELL			GUARDS	APPROX. FAN WT. NO MOTOR	MOTOR WEIGHT LBS	FF	GG	HH	JJ							
			A	B	C	D	E	G	H	J	K	L	M	N	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD								EE						
140	250P	12.5/16.0				30																										755	380	5%	7%	4%	1%			
	280P																																							
	320P	16.0/20.0	61%	57%	55%	33	1/4	1/8	20	27 1/2	32 1/2	35%	25%	55%	25	29%	31%	2	4	68	71	3/4	5	66%	9%	6%	2%				825	560	7%	10	6	2				
	360P																																							
	400P	20.0																																						
440P																																								
160	250P	12.5/16.0				30																																		
	280P																																							
	320P	16.0/20.0	69	66%	63	33	1/4	1/8	24	26 3/4	32 1/2	38%	29%	63	25	33%	35%	2	4	76	79	3/4	5	75%	10%	6%	2%				965	560	7%	10	6	2				
	360P																																							
	400P	20.0																																						
440P																																								
Y METRIC UNITS (mm) Y																										(kg)														
140	250P	315/400				762																																		
	280P																																							
	320P	400/500	1553	1470	1400	838	6.4	17.5	20	699	826	900	649	1400	635	757	808	51	102	1727	1803	191	127	1691	249	157	60				374	252	197	254	152					
	360P																																							
	400P	500																																						
440P																																								
160	250P	315/400				762																																		
	280P																																							
	320P	400/500	1753	1680	1600	838	6.4	17.5	24	679	826	968	749	1600	635	857	908	51	102	1930	2007	19.1	127	1911	273	157	60				438	252	197	254	152					
	360P																																							
	400P	500																																						
440P																																								



U.S. Sales office and factory:
2933 Symmes Road
Fairfield, Ohio 45014
Phone: 513-874-2400
Fax: 513-870-6249

Canadian Sales office:
Woods Air Movement, LTD.
401 Traders Blvd. East, Unit 8
Mississauga, Ontario L4Z 2H8
Phone: 905-501-0211
Fax: 905-501-0399

Represented by:

www.amfan-woods.com

API/3.1M/6/99006

Litho in U.S.A.

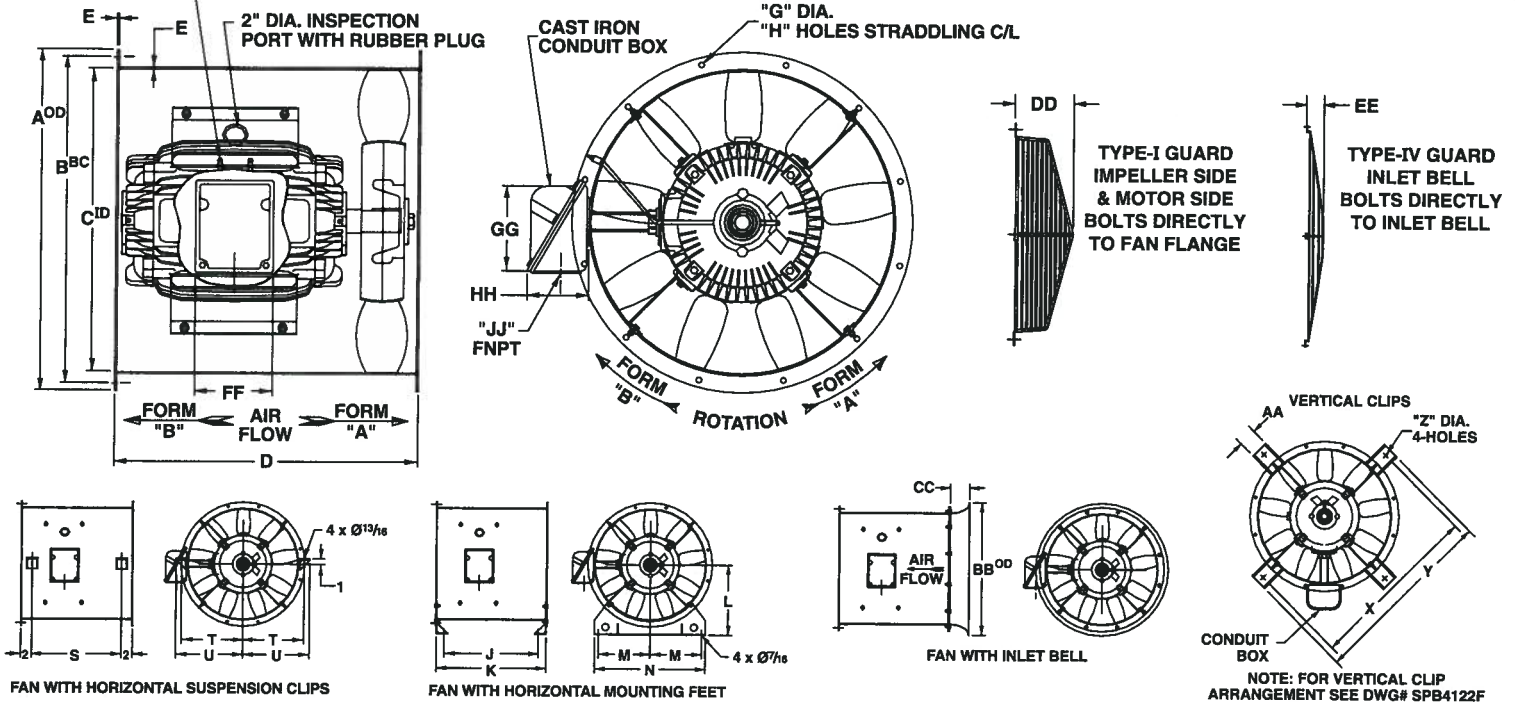
JM AEROFOIL

Fan sizes 50 through 63
Direct Drive with Pad Mounted Motors

AMERICAN FAN COMPANY
2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

WOODS
U.S.A. DIVISION

EXTERNAL MOTOR BEARING GREASE FITTINGS SUPPLIED ON FRAME SIZES 280P AND LARGER, FRAME SIZES 250P AND SMALLER HAVE SEALED, NON-RELUBRICABLE BEARINGS.



FAN SIZE	FRAME SIZE	HUB DIA.	FAN								MOUNTING FEET					HORIZONTAL CLIPS			VERTICAL CLIPS			INLET BELL			GUARDS		APPROX. FAN WT. NO MOTOR	MOTOR WEIGHT LBS	FF	GG	HH	JJ						
			A	B	C	D	E	G	H	J	K	L	M	N	S	T	U	X	Y	Z	AA	BB	CC	DD	EE													
50	140P	6.3/8.0	23%	16	.135	1/2	12	13	15%	12%	8%	19%	12	16	10 3/32	11 1/32	27	29	1/2	3	23%	3%	5%	1%	80	50	4%	6 1/2	3 1/4	3/4								
	180P	8.0/10.0																								85	5%	7 1/8	4 1/4	1								
	210P	10.0/12.5	22 1/2%	19 1/8	20	26%	29 1/2	26	11 1/32	12 3/32	210	380	5%	7%	4%	1 1/4																						
	250P 280P	1.25/16.0	23%	30	1/4	26%	29 1/2	26	11 1/32	12 3/32	210	380	5%	7%	4%	1 1/4																						
56	140P	6.3/8.0	25%	16	.135	1/2	12	13	15%	14	10	22	16	12 2/32	13 3/32	30	32	1/2	3	26 2/32	3 5/8	5%	1 3/8	89	50	4%	6 1/2	3 1/4	3/4									
	180P	8.0/10.0																							85	5%	7%	4%	1									
	210P	10.0/12.5	24%	22%	20	26%	29 1/2	26	12 2/32	13 3/32	117	160	5%	7%	4%	1																						
	250P 280P	1.25/16.0	26%	30	1/4	26%	29 1/2	26	12 2/32	13 3/32	250	380	5%	7%	4%	1 1/4																						
63	140P	6.3/8.0	28%	16	.135	1/2	12	11 1/2	15%	15 1/2	11%	24%	16	13 1/32	14 1/32	34	36	1/2	3	29%	4%	5%	1 3/8	101	50	4%	6 1/2	3 1/4	3/4									
	180P	8.0/10.0																							85	5%	7%	4%	1									
	210P	10.0/12.5	27%	24%	20	25%	29 1/2	15%	11%	24%	131	160	5%	7%	4%	1																						
	250P 280P	1.25/16.0	29%	30	1/4	25%	29 1/2	15%	11%	24%	280	380	5%	7%	4%	1 1/4																						
	320P 360P	16.0	29%	33	1/4	28%	32 1/2	29	13 3/32	14 1/32	303	380	7%	10	6	2/3																						
▼ METRIC UNITS (mm) ▼																							(kg)															
50	140P	160/200	595	560	500	406	3.4	12.7	12	330	400	314	225	502	305	279	304	686	737	12.7	76	600	87	137	30	36	22.7	122	165	83								
	180P	200/250																								44	38.6	136	198	108								
	210P	250/315	95	72.6	136	198	108																															
	250P 280P	315/400	608	762	6.4	679	749	660	282	307	95	172	136	198	108																							
56	140P	160/200	656	620	560	406	3.4	12.7	12	330	400	356	254	559	305	309	334	762	813	12.7	76	668	100	137	50	40	22.7	122	165	83								
	180P	200/250																								53	38.6	136	198	108								
	210P	250/315	114	72.6	136	198	108																															
	250P 280P	315/400	668	762	6.4	679	749	660	312	337	114	172	136	198	108																							
63	140P	160/200	725	689	630	406	3.4	12.7	12	292	400	402	289	630	305	344	369	864	914	12.7	76	757	108	137	50	46	22.7	122	165	83								
	180P	200/250																								59	38.6	136	198	108								
	210P	250/315	127	72.6	136	198	108																															
	250P 280P	315/400	738	762	6.4	641	749	660	347	372	127	172	136	198	108																							
	320P 360P	400	738	838	6.4	718	826	737	347	372	137	252	197	254	152																							

JM AEROFOIL

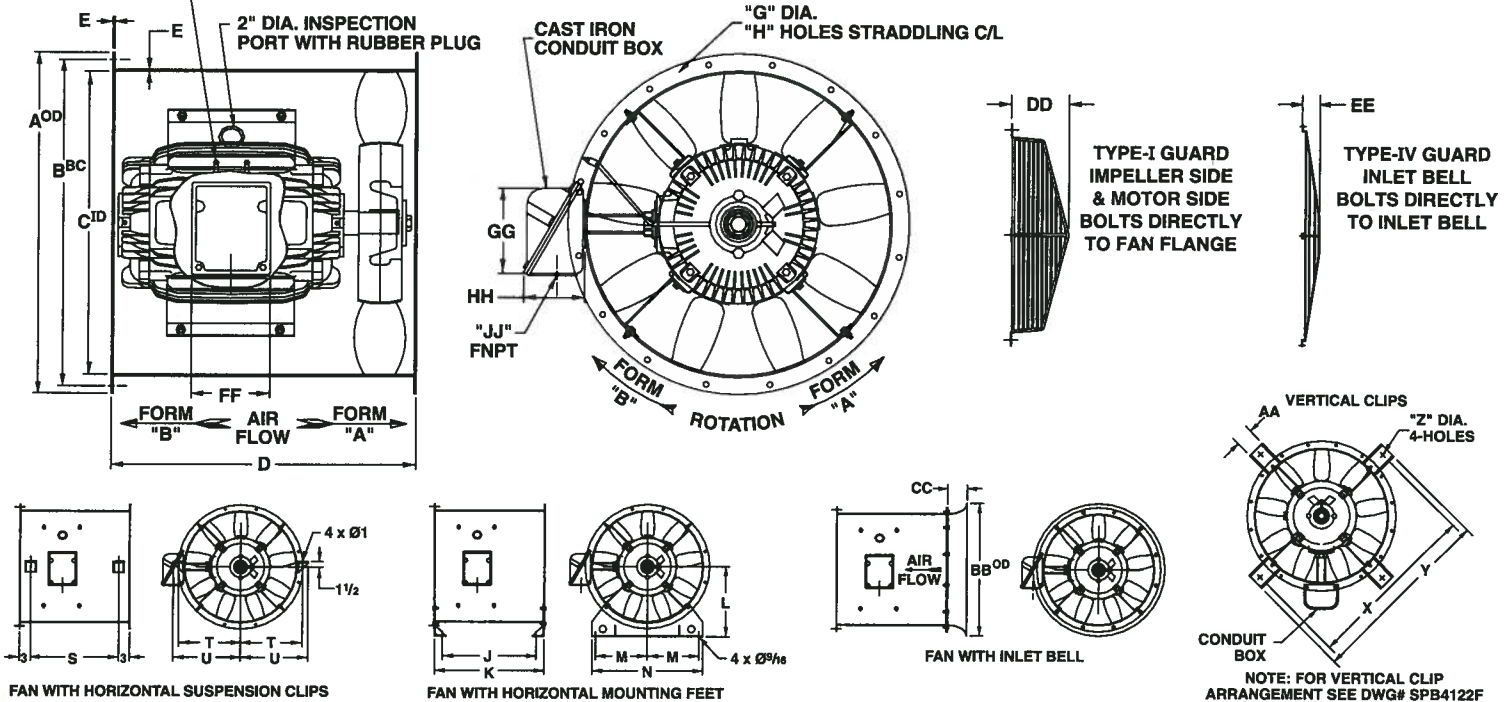
Fan sizes 71 & 80

Direct Drive with Pad Mounted Motors



2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

EXTERNAL MOTOR BEARING GREASE FITTINGS SUPPLIED ON FRAME SIZES 280P AND LARGER, FRAME SIZES 250P AND SMALLER HAVE SEALED, NON-RELUBRICABLE BEARINGS.



FAN SIZE	FRAME SIZE	HUB DIA.	FAN								MOUNTING FEET					HORIZONTAL CLIPS			VERTICAL CLIPS			INLET BELL		GUARDS		APPROX. FAN WT. NO MOTOR	MOTOR WEIGHT LBS	FF	GG	HH	JJ	
			A	B	C	D	E	G	H	J	K	L	M	N	S	T	U	X	Y	Z	AA	BB	CC	DD	EE							
71	180P	8.0/10.0	31 1/8			16	.135	1/2	16	11 1/2	15 3/4	17 3/4	13	27 1/2	10	15 1/2	17 3/2	38	40	1/2	3	33 3/4	5	5 1/2	1 3/2	112	85	4 3/8	6 1/2	3 1/4	3/4	
	210P	10.0/12.5				20				15 1/2	19 1/4				14																	
	250P	12.5/16.0	32 1/2	30 3/8	27 3/8	30	1/4	25 1/4	29 1/2	28 1/4	32 1/2	24	15 3/4	17 3/2	42	44	1/2	4	37 3/8	5 1/4	5 3/4	1 3/2	313	380	5 3/8	7 3/8	4 1/4	1 1/4	2	3		
	320P					33																										
	360P	16.0		33		28 1/4	32 1/2	27																			335	560	7 1/8	10	6	2
																										800	800	7 1/8	10	6	2	3
80	180P	8.0/10.0	35 1/4			16	.135	1/2	16	11 1/2	15 3/4	19 1/4	14 3/4	31 1/2	10	17 1/2	18 1/2	42	44	1/2	4	37 3/8	5 1/4	5 3/4	1 3/2	128	85	4 3/8	6 1/2	3 1/4	3/4	
	210P	10.0/12.5				20				15 1/2	19 1/4				14																	
	250P	12.5/16.0	33 3/8	31 1/2	30	1/4	25 1/4	29 1/2	19 3/4	14 3/4	31 1/2	24	17 1/2	19	42	44	1/2	4	37 3/8	5 1/4	5 3/4	1 3/2	349	380	5 3/8	7 3/8	4 1/4	1 1/4	2	3		
	280P				30																											
	320P	16.0	35 3/4	33	28 1/4	32 1/2	27																									
360P	33																															
▼ METRIC UNITS (mm) ▼																								(kg)								
71	180P	200/250	805			406	3.4	12.7	16	292	400	451	330	708	254	396	434	965	1016	12.7	76	857	126	137	50	51	38.6	122	165	83		
	210P	250/315				508				394	502				356																	
	250P	315/400	818	770	710	762	6.4	718	826	610	749	451	330	708	610	399	437	965	1016	12.7	76	857	126	137	50	142	172	136	198	108		
	280P					762																										
	320P	400	895	860	800	838	6.4	718	826	610	749	502	375	800	610	445	483	1067	1118	12.7	102	957	134	137	50	152	252	197	254	152		
360P	838																															
80	180P	200/250	895			406	3.4	12.7	16	292	400	502	375	800	254	441	479	1067	1118	12.7	102	957	134	137	50	58	38.6	122	165	83		
	210P	250/315				508				394	502				356																	
	250P	315/400	908	860	800	762	6.4	718	826	610	749	502	375	800	610	445	483	1067	1118	12.7	102	957	134	137	50	158	172	136	198	108		
	280P					762																										
	320P	400	908	860	800	838	6.4	718	826	610	749	502	375	800	610	445	483	1067	1118	12.7	102	957	134	137	50	169	252	197	254	152		
360P	838																															

SEE INCH DIMENSIONS ▲

JM AEROFOIL

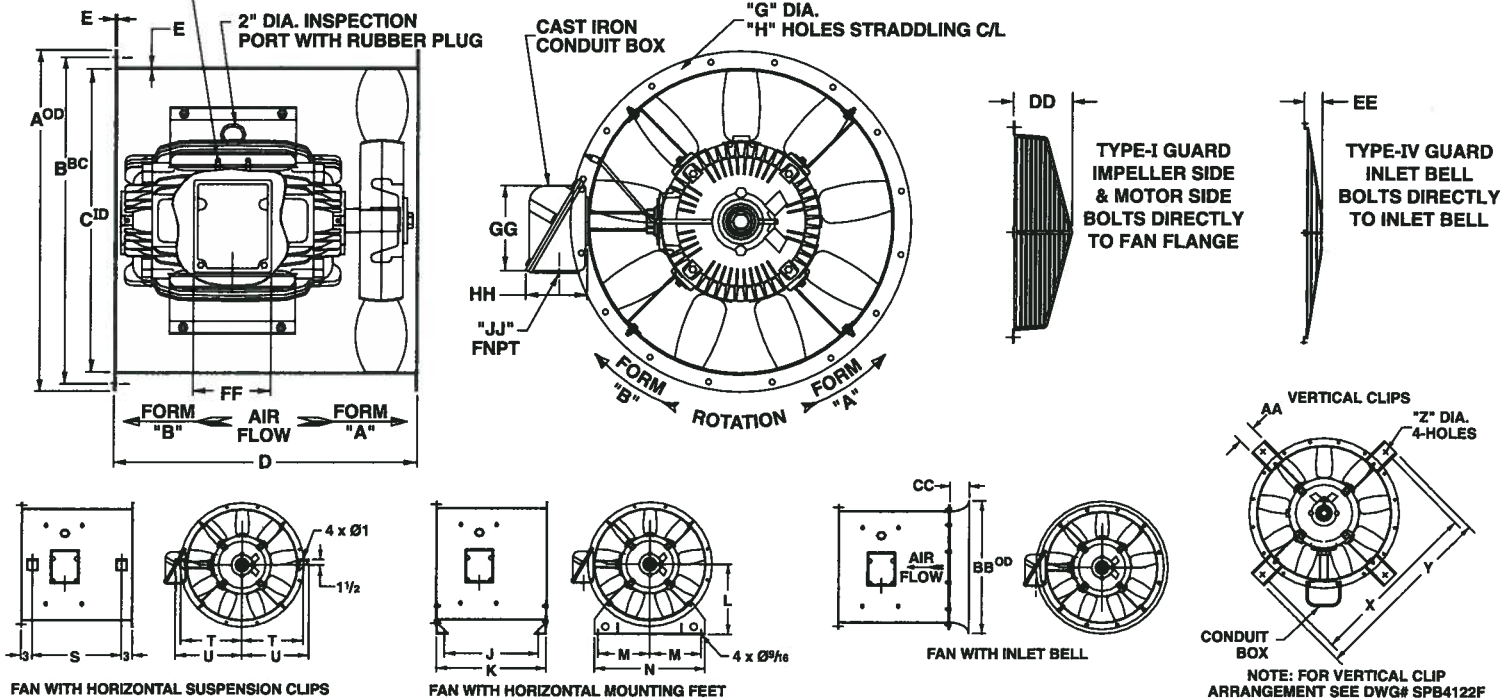
Fan sizes 90 & 100

Direct Drive with Pad Mounted Motors



2933 Symmes Road, Fairfield, Ohio 45014
PH: (513) 874-2400 FAX: (513) 870-6249

EXTERNAL MOTOR BEARING GREASE FITTINGS SUPPLIED ON FRAME SIZES 280P AND LARGER, FRAME SIZES 250P AND SMALLER HAVE SEALED, NON-RELUBRICABLE BEARINGS.



FAN SIZE	FRAME SIZE	HUB DIA.	FAN								MOUNTING FEET					HORIZONTAL CLIPS			VERTICAL CLIPS			INLET BELL			GUARDS		APPROX. FAN WT. NO MOTOR	MOTOR WEIGHT LBS	FF	GG	HH	JJ			
			A	B	C	D	E	G	H	J	K	L	M	N	S	T	U	X	Y	Z	AA	BB	CC	DD	EE										
90	180P	10.0				16	.135		11 1/2	15 3/4			10	19 1/2	20 3/4															143	85	4 9/16	6 1/2	3 3/4	3/4
	210P	10.0/12.5				20			15 1/2	19 1/4			14	19 1/2	20 3/4														178	160	5 3/8	7 7/16	4 1/4	1	
	250P	12.5/16.0	39 1/16	38 1/4	35 7/16	30		16	25 1/4	29 1/2	22	16 3/4	35 7/16	24	19 3/4	20 3/4	47	50	1/2	4	42 7/16	5 1/8	5 3/8	1 3/4				389	380	5 3/8	7 7/16	4 1/4	1 1/4		
	280P					33	1/4		28 1/4	32 1/2				27															416	560	7 1/8	10	6	2	
	320P	16.0																											800	800				3	
	360P																																		
100	180P	10.0				16	.179		10 1/8	15 1/8			10	21 1/8	22 1/8														187	85	4 9/16	6 1/2	3 3/4	3/4	
	210P	10.0/12.5				20			14 1/4	19 1/4			14	21 1/8	22 1/8														241	160	5 3/8	7 7/16	4 1/4	1	
	250P	12.5/16.0	43 3/8	42 1/2	39 3/8	30		16	24 1/4	29 1/2	24 3/4	19	40	24	21 1/8	22 1/8	51	54	5/8	4	47 3/8	6 3/8	5 3/8	1 3/4				428	380	5 3/8	7 7/16	4 1/4	1 1/4		
	280P					33	1/4		27 3/4	32 1/2				27	21 1/8	22 1/8													482	560	7 1/8	10	6	2	
	320P	16.0/20.0																											800	800				3	
	360P																																		
400P	20.0				38				32 3/4	37 1/2			32															532	1170	10 1/4	15 1/2	8 1/2	3		
▼ METRIC UNITS (mm) ▼																							(kg)												
90	180P	250				406	3.4		292	400			254	491	529													65	38.6	122	165	83			
	210P	250/315				508			394	502			356															81	72.6	136	198	108			
	250P	315/400	1008	970	900	762		14.3	641	749	559	425	900	610	495	533	1194	1270	12.7	102	1077	150	137	50			176	172	136	198	108				
	280P							6.4	718	826				686														189	252	197	254	152			
	320P	400																																	
	360P																																		
100	180P	250				406	4.6		276	397			254	543	581													85	38.6	122	165	83			
	210P	250/315				508			378	498			356															109	72.6	136	198	108			
	250P	315/400	1108	1070	1000	762		14.3	629	749	625	483	1016	610	545	583	1295	1372	15.9	102	1199	167	137	50			194	172	136	198	108				
	280P							6.4	705	826				686														219	252	197	254	152			
	320P	400/500																																	
	360P																																		
400P	500				965				832	953			813														241	531	260	394	216				

SEE INCH DIMENSIONS