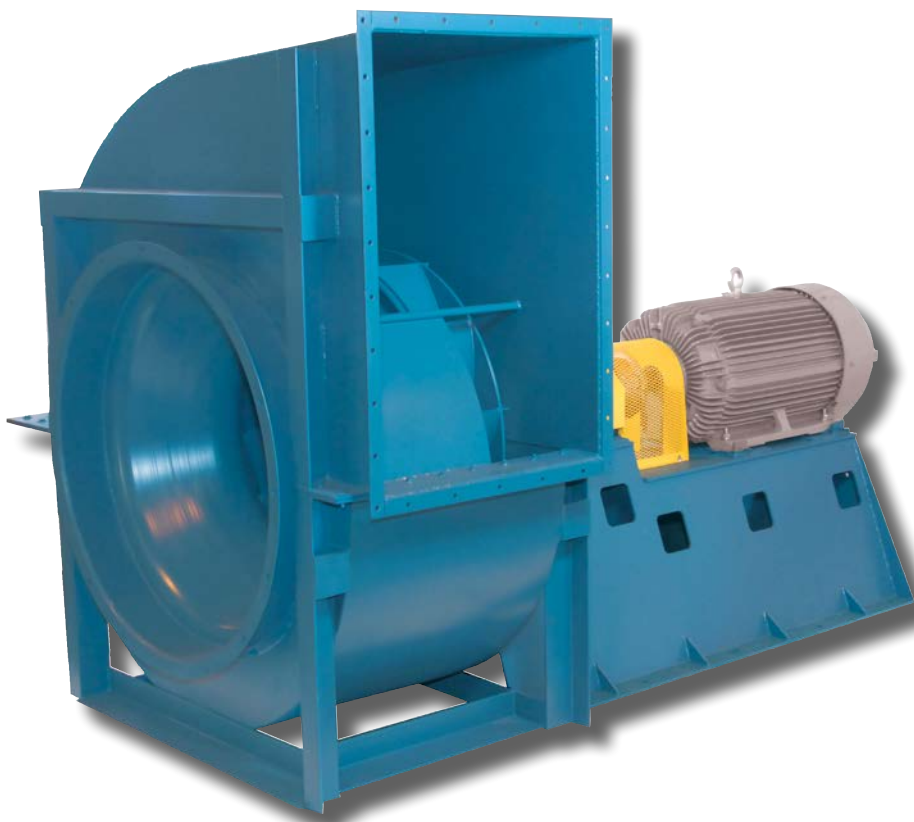


Fans & Blowers

Twin City

Air Moving Solutions.



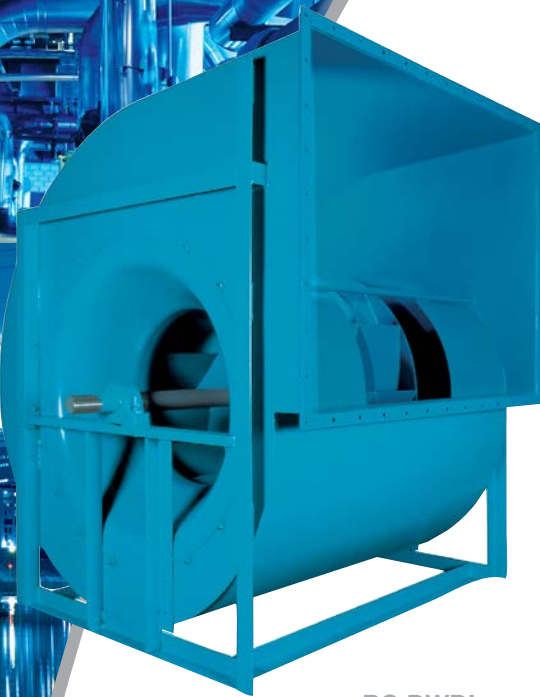
BACKWARD INCLINED FANS

BC SWSI | BC DWDI

Backward Inclined Fans

Models

BC SWSI & BC DWDI



BC DWDI
Arrangement 3

Refer to Catalogue 370 for Model BAE (aerofoil impeller) SWSI and DWDI fans.

Refer to Catalogue 600 for Ventilating Sets featuring Model BC (designated as BCV) and FC (FCV) fans in Arrangement 10.

Refer to Catalogue 370 for Model BAV (aerofoil impeller) ventilation sets in Arrangement 10.



Model BC SWSI & BC DWDI is available with UL/cUL 705 listing, for electrical, File No. E158680.



Twin City Fan & Blower certifies that the Model BC SWSI and BC DWDI fans shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

Refer to Catalogue 306 for sound power levels.

This catalogue features Model BC non-overloading centrifugal fans in SWSI (single width, single inlet) and DWDI (double width, double inlet) design. BAE aerofoil fans offer a slightly higher efficiency and less noise than BC fans at a price premium of about 2%. However, the hollow aerofoil blades are more susceptible to erosion by particulate matter in the airstream than BC blades and thus Model BAE is recommended for clean air applications only. Both designs are a popular choice for the efficient handling of large volumes of relatively clean air at low to moderate pressures in applications such as:

- HVAC (heating, ventilating and air conditioning)
- Combustion air supply
- Filtration and drying systems
- Fume hood and spray booth and other exhaust systems
- Air pollution control (clean side of dust collectors)
- Industrial processes

Please discuss your particular application with the Twin City Fan & Blower representative for your area.

Twin City Fan & Blower has established itself as a leader in the design and manufacture of quality air moving equipment and continues to advance by implementing a philosophy that stresses quality in all of its operations. Our products are known for their rugged construction and reliability of operation. Twin City Fan & Blower offers flexibility in design and construction of fans coupled with superior service before and after the sale.

Model BC SWSI

Sizes

311 mm to 2,495 mm impeller diameters

Performance

Airflow to 130 m³/sec

Static pressure to 4,972 Pa

Arrangements

Available in Arrangements 1, 3, 4, 8, 9, 9F, 10

Model BC DWDI

Sizes

311 mm to 2,495 mm impeller diameters

Performance

Airflow to 162 m³/sec

Static pressure to 3,480 Pa

Arrangements

Available in Arrangements 3, 3F

Impeller Construction

Type BC impellers are constructed of steel using flat single thickness blades, solid welded to the rim and back plate. The inlet-side rim is designed as a proper companion for the inlet cone.

Note that the use of a conical spun shroud (rim) makes BC fans less susceptible to the performance losses associated with poor inlet conditions. All BC impellers are statically and dynamically balanced to grade G6.3 (3.8 mm/s rms peak or less) for smooth operation prior to being assembled in the fan, followed by final balance of the entire rotating assembly.

Housing Construction

All fan housings are continuously welded to provide strength and durability for extended service life — a necessity in all commercial and industrial installations.

All SWSI fans and DWDI Class III and IV fans feature an outlet flange for duct connection as standard. DWDI Class I and II fan outlets are designed for slip-on joint connection. A flanged outlet is available as an option. Inlet collars for slip-joint connections are standard on all SWSI fans. Lifting lugs are standard on all fans. All housings are reinforced with rigid bracing to increase structural integrity. The support angles are intermittently welded and caulked between welds to prevent bleed-through corrosion. Precisely positioned cut off plates and aerodynamically spun inlet cones provide high efficiency and smooth airflow through the fan.

All fans are available in standard discharge configuration (see page 8). SWSI fans Class I and II, sizes 270 and smaller in Arrangements 1, 4, 9 and 10 are field rotatable to any standard discharge position. To help reduce overall heights, all DWDI fans feature a non-rotatable housing design as standard.

Shaft

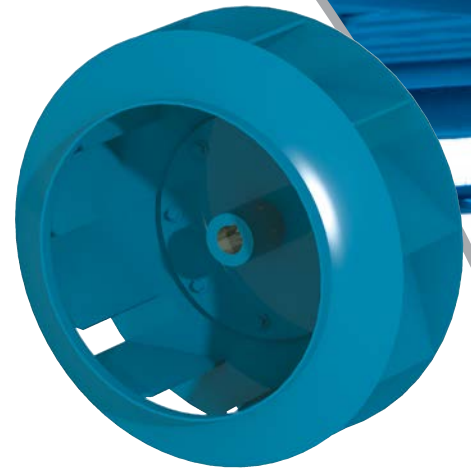
Shafts are AISI Grade 1040 or 1045 hot-rolled steel accurately turned, ground, polished, and ring gauged for accuracy. Shafts are generously sized for a first critical speed of at least 1.43 times the maximum speed for the class.

Bearings

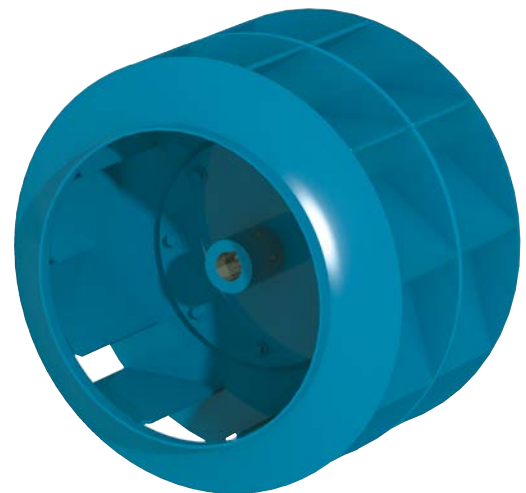
Bearings are heavy duty, grease lubricated, spherical roller or adapter mounted anti-friction ball, self-aligning, pillow block type, selected for minimum average bearing life L-10 in excess of 40,000 hours at the maximum fan RPM.

Mechanical Run Test & Final Vibration Check

All fans are assembled for a mechanical run test and final balance prior to shipment. Vibration readings are taken on both fan bearings in the axial, horizontal, and vertical directions at the specified speed. Fans are balanced to 3.8 mm/s rms peak or less.



BC SWSI Impeller

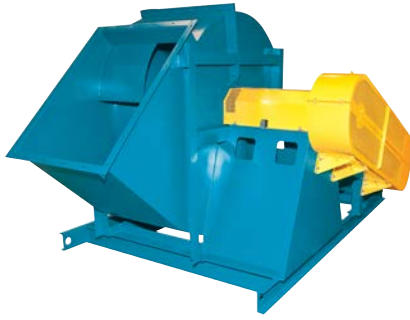


BC DWDI Impeller



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SWSI Arrangements



Arrangement 1 fan with optional unitary base, horizontal split housing, shaft and V-belt drive guard.

Arrangement 1 SWSI — Single Width, Single Inlet

Arrangement 1 fans are usually belt driven. The impeller is overhung on the shaft, i.e., mounted at the end of the shaft. The motor can be mounted in any of the four AMCA standard motor positions, W, X, Y, or Z. The two fan bearings are mounted on the bearing pedestal, out of the airstream. Arrangement 1 fans are thus recommended for high temperature or contaminated air applications. Belt driven configurations offer performance flexibility. If the performance requirements change after the fan has been installed, it is simple and inexpensive to change the drive.

Extended lube line at inlet — standard on all Arrangement 3 fans.

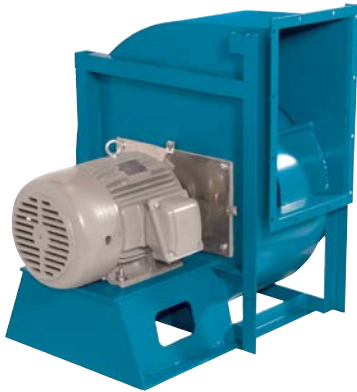


Arrangement 3 SWSI — Single Width, Single Inlet

Arrangement 3 is available in belt driven only. Arrangement 3 SWSI has one bearing located in the airstream. The impeller is mounted between the bearings and supported by the fan housing, which makes it a structurally sound, compact, and economical arrangement.

Arrangement 4 SWSI — Single Width, Single Inlet

Arrangement 4 is available in direct drive only. The fan impeller is mounted directly on the motor shaft with the motor mounted on a pedestal. An Arrangement 4 design offers low maintenance as there are no fan bearings, fan shaft or drive parts to maintain. Arrangement 4 is typically limited to size 365 or smaller.



Direct drive Arrangement 4 with bolted access door and shaft seal.

Typical Direct Drive Speeds

| 60 Hz OPERATION | | 50 Hz OPERATION | |
|-------------------|-----------------|-------------------|-----------------|
| Synchronous Speed | Full Load Speed | Synchronous Speed | Full Load Speed |
| 3600 | 3500 | 3000 | 2900 |
| 1800 | 1750 | 1500 | 1450 |
| 1200 | 1170 | 1000 | 975 |
| 900 | 870 | 750 | 725 |

The actual full load speed of the motor can vary slightly depending upon motor HP and motor design.

Arrangement 8 fan with optional coupling.



Arrangement 8 SWSI — Single Width, Single Inlet

Arrangement 8 is a modified version of Arrangement 1 used for direct drive. The Arrangement 1 bearing pedestal is extended to accommodate the motor. A flexible coupling connects the fan and motor shaft. Refer to the typical direct drive speeds under Arrangement 4. Recommended for 185 kW and larger applications.

SWSI Arrangements

Arrangement 9

SWSI — Single Width, Single Inlet

Arrangement 9 is available as belt driven only. A motor slide base is mounted on the side of the bearing pedestal. This arrangement permits the unit to ship as a complete assembly with the motor and drive mounted. Typically, the motor is mounted on the left side of the pedestal for CW rotation fans and on the right side for CCW rotation fans.

Arrangement 9F

SWSI — Single Width, Single Inlet (Not Shown)

Arrangement 9F is available when a unit requires a motor that is too large to mount on the side of the bearing pedestal. The fan base is extended to accommodate the motor, for horizontal mounting, similar to an Arrangement 1 fan. Typically, the motor is mounted on the left side of the pedestal for CW rotation fans and on the right side for CCW rotation fans. Arrangement 9F is not suitable for mounting vibration isolators directly under the fan.

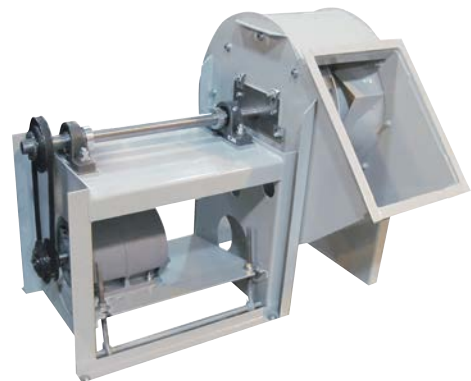


Fan shown is Arrangement 9 CW-THD with non-standard motor location on right-hand side.

Arrangement 10

SWSI — Single Width, Single Inlet

Arrangement 10 is available as belt driven only. For Class I and II fans, sizes 122 through 365, Arrangement 10 units are commonly referred to as Ventilating Sets. (Refer to Catalogue 600 for more details.) An Arrangement 10 unit has an adjustable motor base mounted inside the bearing pedestal. This arrangement offers a more compact design than the Arrangement 9 and is suitable for roof or outdoor installations with a weather cover.



Class II Arrangement 10 ventilating set with optional shaft cooler and insulated heat shield.

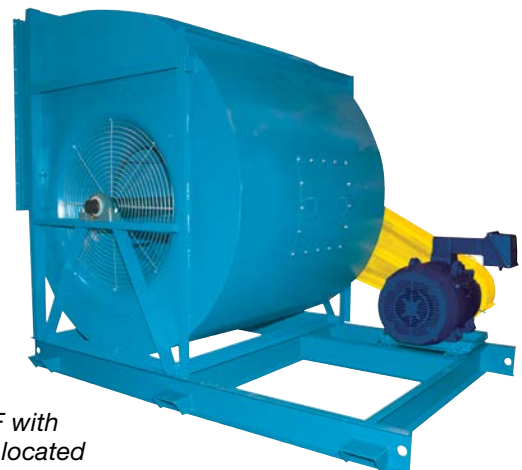
DWDI Arrangements

Arrangement 3

DWDI fans are generally supplied in Arr. 3 for V-belt drive. The impeller is mounted between the bearings and supported by the fan housing. Since both bearings are located in the airstream, standard DWDI fans should be used for clean air applications with air temperatures limited to 54°C. The motor can be mounted in any of the four standard motor positions: W, X, Y or Z.

Arrangement 3F

Arr. 3F offers an integral extended base to accommodate the motor. The base is pre-punched to accept vibration isolators. Arr. 3F is available to Size 660 and for motor positions W and Z as standard. For motor positions X and Y, consult factory.



Arr. 3F with motor located in "Z" position.

Optional Construction

Split Housings

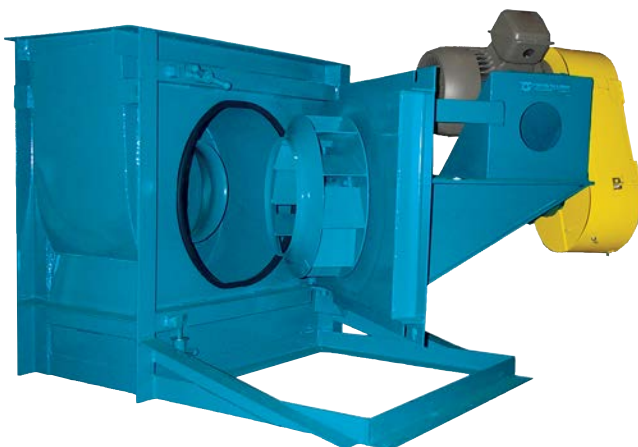
All fans are designed to permit impeller removal through the fan inlet. To suit installation as well as transportation requirements, Twin City Fan & Blower offers horizontal split, pie-shaped, as well as other special split housing designs. Pie-shaped split housings allow fan impeller and shaft removal without disconnecting ductwork.



Fan with pie-shaped split housing with bolted access door

Swingout Construction

Swingout fans are ideal for applications requiring frequent cleaning and inspection of the fan impeller and interior of the housing such as found in spray painting booth exhaust. Refer to Catalogue GA200 for other types of easy access fans offered by Twin City Fan & Blower.



Spark Resistant Construction

Fan applications may involve the handling of potentially explosive or flammable particles, fumes or vapours. Such applications require careful consideration by the system designer to insure the safe handling of such gases. Twin City Fan & Blower offers the following classifications of spark resistant construction per AMCA Standard 99-0401-86. It is the specifier or the user's responsibility to specify the type of spark resistant construction with full recognition of the potential hazards and the degree of protection required.

- Type A All parts of the fan in contact with the airstream must be made of non-ferrous material — usually aluminium and limited to 120°C operation.
- Type B The fan shall have a non-ferrous impeller and non-ferrous ring about the opening through which the shaft passes — usually aluminium impeller and anti-spark track and limited to 120°C construction.
- Type C The fan shall be so constructed that the shift of the impeller or shaft will not permit two ferrous parts of the fan to rub or strike. This is accomplished with an aluminium inlet cone and anti-spark track. This construction is limited to 250°C. Construction to 425°C is available using a steel inlet cone with copper/bronze lining.

Notes:

1. Bearings shall be placed outside the airstream. Therefore, do not use Arrangement 3 or 7.
2. The user shall electrically earth all fan parts. Refer to the above listed AMCA standard for full details.

Special Metals

To suit the demanding applications of today's industry, Twin City Fan & Blower offers a variety of material for construction, including aluminium and stainless steel. We offer AWS and ASME certified welding procedures and welding technicians to assure quality construction when using special metals as well.

High Temperature Modifications

Construction

Standard fan design options are available to handle airstream temperatures to 425°C. Consult your Twin City Fan & Blower representative for applications over 425°C. The fan bearings should be kept outside of the hot airstream and below 54°C ambient. High temperature operating limits, available arrangements, and necessary modifications are shown in Table 1.



Shaft Cooler and Shaft Seal

Table 1. High Temperature Construction Requirements

| TEMPERATURE (°C) | TYPE OF BEARING | LUBRICATION | OTHER REQUIREMENTS | AVAILABLE ARRANGEMENTS |
|------------------|---|-------------------|--|---|
| -28°C to +148°C | Ball or Roller | Grease | Standard Fan | Arr. 1, 8, 9, 9F, 10 Arr. 3 and 3F to 54°C Arr. 4 to 82°C |
| 148°C to 260°C | Ball or Roller with (1) Expansion Bearing | High Temp. Grease | Shaft Cooler, Shaft Seal. For Arr. 9 & 10 Fans, a Motor Heat Shield is Included. | Arr. 1, 8, 9, 9F, 10 |
| 260°C to 426°C | Ball or Roller with (1) Expansion Bearing | High Temp. Grease | High Temp. Aluminum Paint Shaft Cooler, Shaft Seal. For Arr. 9 & 10 Fans, a Motor Heat Shield is included. | Arr. 1, 8, 9, 9F, 10 (Arr. 9 & 10 Limited to 315°C) |

Derating Factors For High Temperature

Fan operation at high temperature adversely affects the strength of fan impellers. As a result, the maximum safe speed must be derated by the factors shown in Table 2.

Example: Maximum safe speed at 315°C for a size 365 BC, SWSI, Class II steel impeller = 0.86 x 1283 = 1103 RPM (1283 RPM is maximum RPM at 21°C).

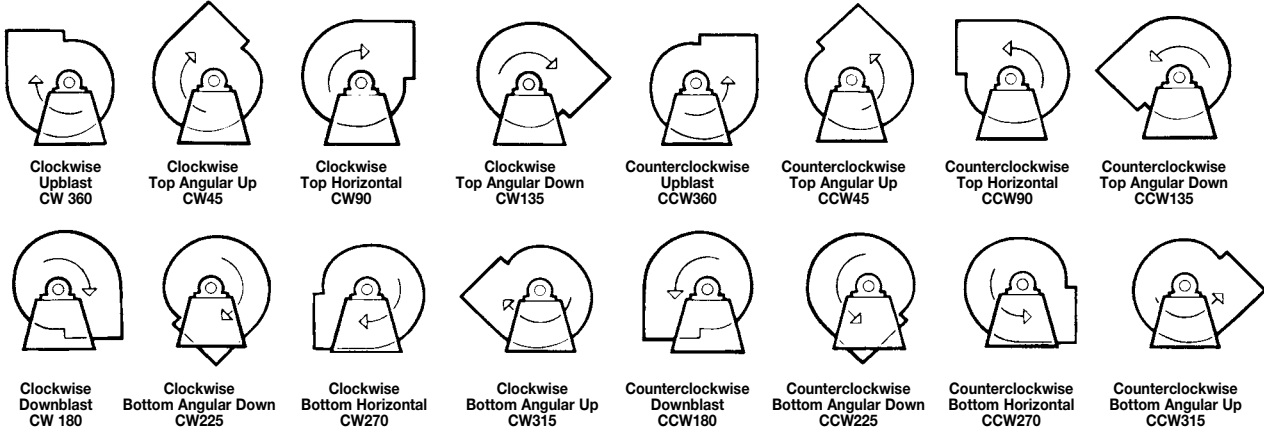
Table 2. Derating Factors For High Temperature

| TEMPERATURE (°C) | STANDARD STEEL | STAINLESS STEEL |
|------------------|----------------|-----------------|
| 20 | 1.00 | 1.00 |
| 95 | 0.99 | 0.95 |
| 120 | 0.98 | 0.93 |
| 150 | 0.98 | 0.91 |
| 205 | 0.96 | 0.88 |
| 260 | 0.93 | 0.84 |
| 315 | 0.90 | 0.81 |
| 370 | 0.80 | 0.78 |
| 425 | 0.60 | 0.75 |
| 480 | — | 0.73 |
| 535 | — | 0.70 |



Standard Configuration

Designation for Rotation and Discharge



Direction of rotation is determined from drive side of the fan.

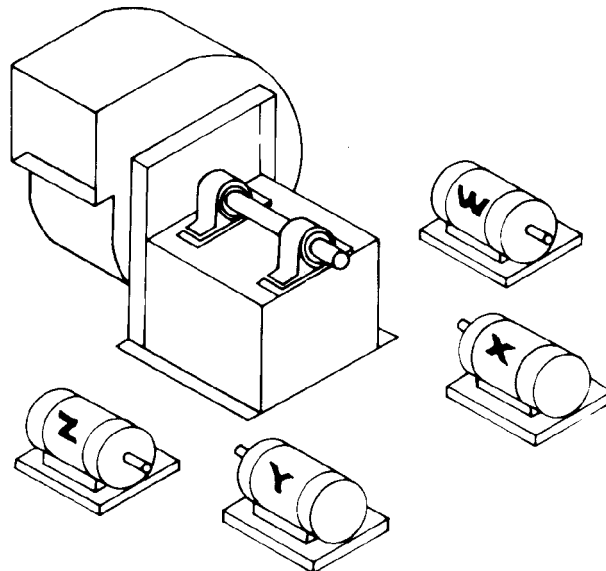
On single inlet fans, the drive side is always considered the side opposite the fan inlet.

On double inlet fans with drives on both sides, the drive side is that with the higher power drive unit.

The direction of discharge is determined in accordance with the diagrams shown above. The angle of discharge references the vertical axis of the fan and is designated in degrees above or below that reference axis.

On fans inverted for ceiling suspension or side-wall mounting, the discharge is determined when the fan is resting on the floor.

Motor Positions



The drawing above illustrates the AMCA motor position standards for Arrangement 1 and 3 fans (Arrangement 1 shown). The location of the motor is determined by facing the drive side of the fan and designating the motor position by letters W, X, Y, or Z, in accordance with the diagram shown above.

Illustrations reprinted from AMCA Publication 99 Standards Handbook, with the express written permission from the Air Movement and Control Association International, Inc., 30 West University Drive, Arlington Heights, IL 60004-1983.

Volume Control Devices

Outlet dampers, variable inlet vanes, and variable frequency drives are three popular devices used to control volume for fan systems.

Variable Inlet Vanes

Variable inlet vanes cause the entering air to spin in the direction of impeller rotation, resulting in reduction in volume, static pressure and absorbed power and thus providing an infinite number of fan curves approximately parallel to the original fan curve. Variable inlet vanes cost about 50% to 80% more than outlet dampers but offer significant savings in energy. Because of their simplicity, inlet vanes can be more reliable when compared to variable frequency drives.

There are two types of variable inlet vanes: nested (internal type) and bolted on (external type).

Nested inlet vanes are built into the fan inlet cone and offer the advantage of saving space and lower cost as opposed to the external type, and they may be provided on all fan sizes 165 and larger. Twin City Fan & Blower offers cantilevered vanes to size 730 Class II fans to minimize insertion losses and noise associated with centre hub design.

External inlet vanes are bolted to the inlet of the fan and are available as standard to size 150. Use of external vanes should be considered for hostile environments since operating linkages are shielded from the airstream. Both types of inlet vanes are available to 315°C construction.

Outlet Dampers

The closing of the damper adds to the resistance that the fan is working against. This moves the operating point to the left of the initial rating point. The savings in power depends on the relative position on the fan curve and is usually much less than offered by other methods. Outlet dampers are typically the least expensive option and should be considered when infrequent operation at lesser capacity is desired or when handling hot, humid or particulate laden air.

There are two types of outlet dampers: parallel blade and opposed blade.

Parallel blade dampers are recommended for systems where air volume is modulated between fully open to about 75% of open.

Opposed blade dampers cost about 10% more and are recommended for systems where volume is modulated over the entire range. Opposed blades reduce air volume in a closer relationship to the control arm movement.

Variable Frequency Drive (VFD) Fan Motors

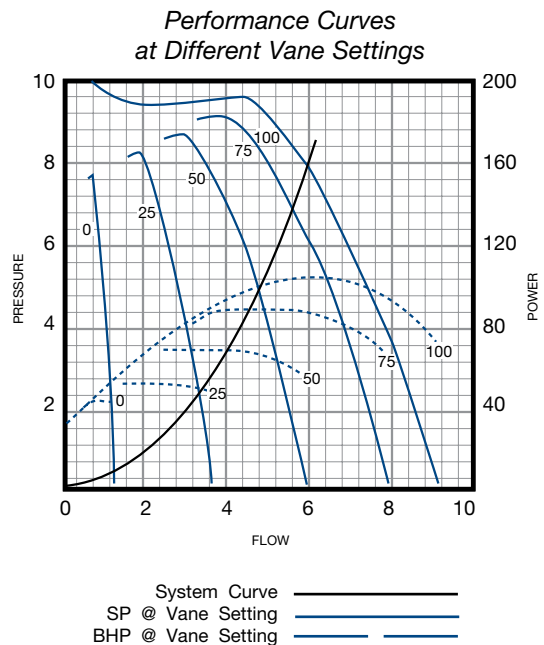
VFD changes the fan speed and can provide the greatest potential for energy savings, although at highest initial cost. VFD should be considered for extended operation at part load conditions, especially below 70% of the full volume operation.



Nested Inlet Vanes



External Inlet Vanes

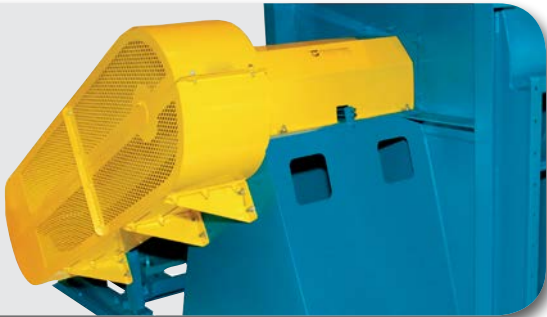


Parallel Blade
Outlet Damper



Opposed Blade
Outlet Damper

Accessories



Belt, Bearing and Shaft Guard



Unitary Base



Shaft Coolers



Belt Guards

A belt guard protects personnel from the moving drive parts. Both standard and totally enclosed type guards are available.

Shaft and Bearing Guards (SWSI)

Solid sheet metal guards cover shaft and bearings and come with extended lube lines to a common point out either side of the guard. A guard spanning the shaft between the bearings is also available to provide easy access to bearings for lubrication and vibration monitoring.

Unitary Base

A structural steel base provides common support to fan, motor and drive including guards. This style of base is designed for use without isolators and requires adequate foundation integrity for proper operation.

Vibration Isolation Bases

Heavy structural base for fan, motor and drive is designed for use with spring or rubber-in-shear type isolators. Use of flexible connectors at inlet and outlet is required on fans with isolators.

V-Belt Drives

V-belt drives offer an economical yet flexible means of transmitting power to the fans. There are two types of V-belt drives.

- **Adjustable Pitch or Variable Speed Drives**

An adjustable pitch drive offers easy adjustment of speed. The motor pulley pitch can be adjusted when the fan is at rest which can offer speed variation of about 10% from the design speed. This style of sheave can result in higher vibration so adjustable pitch drives are not recommended for use on motors over 7.5 kW or wherever low vibration is required.

- **Fixed Pitch or Constant Speed Drives**

This type of drive offers low cost and lowest vibration levels. Speed change can often be accomplished by changing only one of the sheaves.

Bearing Upgrades

Unit roller or split pillow block, double row roller bearings are available. Split pillow block roller bearings are not available for fans with less than 35 mm diameter bearings and are not recommended for fans with light loadings. Refer to Fan Engineering Data FE-1200 and FE-1300 for the correct type of bearings, selection criteria, maintenance, etc.

Shaft Cooler or Heat Slinger

A cast aluminium shaft cooler is recommended to dissipate the heat and protect the fan bearings for all applications over 150°C. (Refer to picture on page 7.)

Special Paint & Protective Coatings

Twin City Fan & Blower has an in-house, specialty coating facility to handle any type of coating requirement. Refer to Engineering Supplement ES-35 for more details.

Access Doors

Bolted, quick opening, and raised bolted access doors are available for impeller inspection or maintenance.

Drain

Threaded pipe coupling welded to the lowest point in the housing scroll. All fans come with a drain hole in the bottom of the housing.

Shaft Seal

A shaft seal reduces leakage and protects the bearings from a contaminated airstream. It is constructed of non-asbestos woven fibrous materials (ceramic felt) compressed between an aluminium cover plate and the fan housing. A ceramic felt shaft seal does not make the fan air tight. A variety of special seals are available for low leakage applications requiring more positive protection, including mechanical type stuffing boxes. (The picture on page 7 shows a standard seal.)

Flanged Inlet

A punched inlet flange is available for duct mounting.

Flanged Outlet (DWDI Class I & II)

A punched or un-punched flange is welded to the fan outlet. An un-punched flanged outlet is standard on all SWSI and DWDI Class III and IV fans.

Inlet/Outlet Companion Flanges

Companion flanges are used for installing the fan to flexible sleeve connections and are punched to match the fan's inlet or outlet.

Inlet and Outlet Screens

Safety screens are available for mounting in the fan inlet or outlet in non-ducted applications.

Other Accessories Available

- Variation in impeller diameter and width
- Inlet boxes
- Bearings RTD
- Piezometer ring airflow measuring system
- Consult factory for other accessories



Quick-Open
Access Door

Bolted
Access Door

Raised Bolted
Access Door



Drain



Shaft Seal



Safety Screen



Companion Inlet Flange

Fans & Blowers
Twin City

Flow Measurement System

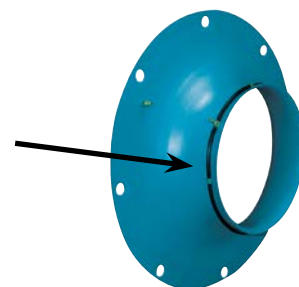
Piezometer Ring (Airflow Measuring System)

A piezometer ring is available on model BC fans, as well as other Twin City Fan housed and plenum fans, as part of an airflow measuring system, based on the principle of a flow nozzle. The inlet cone of the fan is used as the flow nozzle. The flow can be calculated by measuring the pressure drop through the inlet cone. No tubes or sensors are inserted in the high velocity airstream which could obstruct airflow.

The system, consists of a piezometer ring mounted at the throat and a static pressure tapping mounted on the face of the inlet cone. A differential pressure transducer and digital display can also be provided.

The pressure drop is measured from the tapping located on the face of the inlet cone to the piezometer ring in the throat. The inlet tapping is connected

Piezometer Ring Mounted at Throat of Inlet Cone



to the high-pressure side of the transducer and the piezometer ring is connected to the low-pressure side.

Based on Twin City Fan laboratory tests, the system was determined to be accurate within +/-5%.

Refer to Twin City Fan Engineering Supplement ES-105.

NOTE: Twin City Fan does not recommend placement of flow measuring probes inside the fan inlet cone in the path of airflow. These devices create disturbances and unpredictable performance losses. Twin City Fan will not be responsible for loss of performance due to such devices.

Fan Selection Guidelines

The performance tables in this catalog are based on fans handling standard air at a density of 1.2 kg/m³. This is equivalent to air at 21°C at sea level (101.325 kPa barometric pressure). When specified performance is at a density different than standard,

it must be converted to the equivalent standard conditions before the fan can be selected from the performance tables. The equivalent standard conditions can be calculated by using the Temperature and Altitude Density Ratios shown in the table below.

Table 3. Temperature and Altitude Density Ratios

| AIR TEMP °C | ALTITUDE IN METRES ABOVE SEA LEVEL | | | | | | | | | | | |
|----------------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0 | 300 | 600 | 900 | 1200 | 1500 | 1750 | 2000 | 2400 | 2800 | 3500 | 4500 |
| | BAROMETRIC PRESSURE IN kPa | | | | | | | | | | | |
| | 101.32 | 97.77 | 94.32 | 90.97 | 87.71 | 84.55 | 81.99 | 79.49 | 75.62 | 71.91 | 65.76 | 57.73 |
| -40 | 1.258 | 1.214 | 1.171 | 1.129 | 1.089 | 1.050 | 1.018 | 0.987 | 0.939 | 0.893 | 0.816 | 0.717 |
| -20 | 1.158 | 1.117 | 1.078 | 1.040 | 1.002 | 0.966 | 0.937 | 0.909 | 0.864 | 0.822 | 0.752 | 0.660 |
| 10 | 1.035 | 0.999 | 0.963 | 0.929 | 0.896 | 0.864 | 0.838 | 0.812 | 0.772 | 0.735 | 0.672 | 0.590 |
| 20 | 1.000 | 0.965 | 0.931 | 0.898 | 0.866 | 0.835 | 0.809 | 0.785 | 0.746 | 0.710 | 0.649 | 0.570 |
| 40 | 0.936 | 0.903 | 0.871 | 0.840 | 0.810 | 0.781 | 0.757 | 0.734 | 0.699 | 0.664 | 0.608 | 0.533 |
| 65 | 0.867 | 0.837 | 0.807 | 0.778 | 0.751 | 0.724 | 0.702 | 0.680 | 0.647 | 0.615 | 0.563 | 0.494 |
| 100 | 0.786 | 0.758 | 0.732 | 0.706 | 0.680 | 0.656 | 0.636 | 0.617 | 0.587 | 0.558 | 0.510 | 0.448 |
| 125 | 0.736 | 0.710 | 0.685 | 0.661 | 0.637 | 0.614 | 0.596 | 0.577 | 0.549 | 0.522 | 0.478 | 0.419 |
| 150 | 0.693 | 0.669 | 0.645 | 0.622 | 0.600 | 0.578 | 0.561 | 0.544 | 0.517 | 0.492 | 0.450 | 0.395 |
| 175 | 0.654 | 0.631 | 0.609 | 0.587 | 0.566 | 0.546 | 0.529 | 0.513 | 0.488 | 0.464 | 0.424 | 0.373 |
| 200 | 0.619 | 0.597 | 0.576 | 0.556 | 0.536 | 0.517 | 0.501 | 0.486 | 0.462 | 0.439 | 0.402 | 0.353 |
| 225 | 0.588 | 0.567 | 0.547 | 0.528 | 0.509 | 0.491 | 0.476 | 0.461 | 0.439 | 0.417 | 0.382 | 0.335 |
| 250 | 0.560 | 0.540 | 0.521 | 0.503 | 0.485 | 0.467 | 0.453 | 0.439 | 0.418 | 0.397 | 0.363 | 0.319 |
| 275 | 0.535 | 0.516 | 0.498 | 0.480 | 0.463 | 0.446 | 0.433 | 0.420 | 0.399 | 0.380 | 0.347 | 0.305 |
| 300 | 0.511 | 0.493 | 0.476 | 0.459 | 0.442 | 0.426 | 0.414 | 0.401 | 0.381 | 0.363 | 0.332 | 0.291 |
| 350 | 0.470 | 0.454 | 0.438 | 0.422 | 0.407 | 0.392 | 0.380 | 0.369 | 0.351 | 0.334 | 0.305 | 0.268 |
| 375 | 0.452 | 0.436 | 0.421 | 0.406 | 0.391 | 0.377 | 0.366 | 0.355 | 0.337 | 0.321 | 0.293 | 0.258 |
| 400 | 0.435 | 0.420 | 0.405 | 0.391 | 0.377 | 0.363 | 0.352 | 0.341 | 0.325 | 0.309 | 0.282 | 0.248 |
| 425 | 0.420 | 0.405 | 0.391 | 0.377 | 0.364 | 0.350 | 0.340 | 0.330 | 0.313 | 0.298 | 0.273 | 0.239 |
| 450 | 0.405 | 0.391 | 0.377 | 0.364 | 0.351 | 0.338 | 0.328 | 0.318 | 0.302 | 0.287 | 0.263 | 0.231 |
| 500 | 0.379 | 0.366 | 0.353 | 0.340 | 0.328 | 0.316 | 0.307 | 0.297 | 0.283 | 0.269 | 0.246 | 0.216 |
| 550 | 0.356 | 0.344 | 0.331 | 0.320 | 0.308 | 0.297 | 0.288 | 0.279 | 0.266 | 0.253 | 0.231 | 0.203 |
| 600 | 0.336 | 0.324 | 0.313 | 0.302 | 0.291 | 0.280 | 0.272 | 0.264 | 0.251 | 0.238 | 0.218 | 0.191 |

Example

Assume a 365 BC SWSI fan to handle 7.3 m³/sec, 625 Pa SP, at 150°C and 900 m altitude.

- For the operating conditions of 150°C and 900 m altitude, the factor can be found in Table 3 to be 0.622.
- Divide the operating SP by this factor. Thus, 625 Pa ÷ 0.622 = 1005 Pa SP, which is the equivalent static pressure at standard air density.

- From the 365 BC SWSI performance table find the fan RPM and absorbed power for 7.3 m³/sec and 1005 Pa SP to be 893 RPM and 9.6 kW (by interpolation) at standard conditions. 9.6 kW is also referred to as "cold" or "starting" absorbed power.

To determine the absorbed power at operating conditions, multiply the absorbed power at standard conditions by the factor from Table 3 (9.6 x 0.622 = 6.0 kW). The absorbed power at operating conditions is 6.0 kW.

Maximum RPM, Impeller Weights & WR² (moment of inertia in kg-m²)

BC SWSI

| FAN SIZE | CLASS I | | | CLASS II | | | CLASS III | | | CLASS IV | | |
|----------|----------|----------------------|--------------------------------------|----------|----------------------|--------------------------------------|-----------|----------------------|--------------------------------------|-----------------|----------------------|--------------------------------------|
| | MAX. RPM | IMPELLER WEIGHT (kg) | WR ² (kg-m ²) | MAX. RPM | IMPELLER WEIGHT (kg) | WR ² (kg-m ²) | MAX. RPM | IMPELLER WEIGHT (kg) | WR ² (kg-m ²) | MAX. RPM | IMPELLER WEIGHT (kg) | WR ² (kg-m ²) |
| 122 | 3167 | 6.8 | 0.07 | 4119 | 6.8 | 0.07 | 5208 | 10 | 0.1 | 5608 | 11.4 | 0.11 |
| 135 | 2874 | 7.7 | 0.1 | 3738 | 8.2 | 0.11 | 4726 | 12.3 | 0.16 | 5099 | 12.7 | 0.16 |
| 150 | 2587 | 9.1 | 0.16 | 3364 | 9.5 | 0.17 | 4253 | 14.1 | 0.24 | 4580 | 15.0 | 0.24 |
| 165 | 2352 | 10.9 | 0.24 | 3058 | 12.7 | 0.29 | 3867 | 17.3 | 0.35 | 4167 | 16.8 | 0.35 |
| 182 | 2118 | 14.1 | 0.37 | 2729 | 17.7 | 0.46 | 3473 | 24.1 | 0.59 | 3766 | 24.1 | 0.59 |
| 200 | 1932 | 17.3 | 0.53 | 2490 | 22.3 | 0.73 | 3169 | 28.6 | 0.83 | 3442 | 34.1 | 1.1 |
| 222 | 1737 | 30.0 | 1.0 | 2238 | 33.6 | 1.2 | 2848 | 38.6 | 1.3 | 3088 | 44.5 | 1.7 |
| 245 | 1577 | 36.8 | 1.6 | 2033 | 39.5 | 1.8 | 2587 | 50.0 | 2.1 | 2808 | 59.1 | 2.8 |
| 270 | 1397 | 42.7 | 2.4 | 1803 | 46.8 | 2.7 | 2287 | 60.0 | 3.3 | 2544 | 69.1 | 4.1 |
| 300 | 1257 | 51.4 | 3.7 | 1623 | 56.8 | 4.3 | 2059 | 78.2 | 5.9 | 2291 | 78.2 | 5.7 |
| 330 | 1143 | 68.6 | 6.3 | 1475 | 75.9 | 6.7 | 1871 | 97.7 | 9.3 | 2081 | 93.2 | 8.4 |
| 365 | 995 | 90.0 | 10.3 | 1283 | 97.3 | 11.0 | 1727 | 124 | 12.1 | 1883 | 115 | 12.5 |
| 402 | 903 | 111 | 15.2 | 1163 | 115 | 16.1 | 1566 | 137 | 18.4 | 1706 | 135 | 18.4 |
| 445 | 817 | 155 | 23.9 | 1052 | 178 | 29.2 | 1416 | 187 | 28.7 | 1545 | 203 | 32.7 |
| 490 | 742 | 179 | 34.4 | 956 | 207 | 42.2 | 1286 | 217 | 41.5 | 1401 | 250 | 50.4 |
| 542 | 670 | 210 | 50.9 | 863 | 246 | 58.7 | 1162 | 275 | 66.2 | 1260 | 332 | 84.0 |
| 600 | 606 | 270 | 82.3 | 780 | 292 | 87.1 | 1050 | 360 | 112 | 1146 | 412 | 132 |
| 660 | 551 | 390 | 127 | 710 | 443 | 153 | 955 | 485 | 170 | 1040 | 568 | 209 |
| 730 | 498 | 521 | 225 | 641 | 519 | 225 | 863 | 579 | 260 | 940 | 712 | 325 |
| 807 | 450 | 632 | 347 | 580 | 666 | 369 | 780 | 778 | 439 | 851 | 900 | 522 |
| 890 | 408 | 865 | 567 | 526 | 867 | 567 | 708 | 1081 | 732 | 772 | 1218 | 851 |
| 982 | 370 | 1020 | 825 | 477 | 1026 | 826 | 641 | 1262 | 1109 | CONSULT FACTORY | | |

BC DWDI

| FAN SIZE | CLASS I | | | CLASS II | | | CLASS III | | | CLASS IV | | |
|----------|----------|----------------------|--------------------------------------|----------|----------------------|--------------------------------------|------------------|----------------------|--------------------------------------|------------------|----------------------|--------------------------------------|
| | MAX. RPM | IMPELLER WEIGHT (kg) | WR ² (kg-m ²) | MAX. RPM | IMPELLER WEIGHT (kg) | WR ² (kg-m ²) | MAX. RPM | IMPELLER WEIGHT (kg) | WR ² (kg-m ²) | MAX. RPM | IMPELLER WEIGHT (kg) | WR ² (kg-m ²) |
| 122 | 3196 | 9.3 | 0.11 | 4168 | 10.0 | 0.11 | CONSULT FACTORY* | | | CONSULT FACTORY* | | |
| 135 | 2904 | 10.8 | 0.16 | 3787 | 14.9 | 0.19 | | | | | | |
| 150 | 2594 | 13.5 | 0.25 | 3383 | 17.1 | 0.29 | | | | | | |
| 165 | 2358 | 16.9 | 0.39 | 3075 | 21.6 | 0.48 | | | | | | |
| 182 | 2149 | 24.2 | 0.6 | 2776 | 27.1 | 0.72 | 3504 | 36.2 | 0.97 | 3766 | 40.0 | 0.99 |
| 200 | 1961 | 27.6 | 0.86 | 2533 | 41.5 | 1.22 | 3197 | 45.5 | 1.4 | 3442 | 55.5 | 1.8 |
| 222 | 1762 | 38.9 | 1.48 | 2277 | 49.1 | 1.9 | 2874 | 60.9 | 2.2 | 3088 | 74.1 | 2.8 |
| 245 | 1601 | 54.1 | 2.5 | 2068 | 59.1 | 2.9 | 2610 | 74.5 | 3.4 | 2808 | 98.6 | 4.6 |
| 270 | 1392 | 63.6 | 3.8 | 1830 | 78.2 | 4.6 | 2267 | 93.2 | 5.4 | 2544 | 115 | 7.2 |
| 300 | 1253 | 78.2 | 6.1 | 1647 | 94.5 | 7.2 | 2040 | 126 | 9.9 | 2290 | 135 | 9.9 |
| 330 | 1139 | 115 | 10.6 | 1497 | 125 | 11.4 | 1855 | 158 | 15.9 | 2081 | 154 | 14.5 |
| 365 | 1015 | 143 | 16.7 | 1302 | 155 | 18.0 | 1651 | 201 | 24.5 | 1883 | 181 | 21.5 |
| 402 | 920 | 168 | 24.7 | 1181 | 183 | 26.4 | 1497 | 209 | 31.6 | 1706 | 220 | 31.7 |
| 445 | 832 | 254 | 38.5 | 1068 | 298 | 49.1 | 1354 | 289 | 48.5 | 1545 | 330 | 56.7 |
| 490 | 748 | 292 | 55.7 | 966 | 347 | 71.2 | 1222 | 331 | 70.5 | 1401 | 397 | 85.4 |
| 542 | 676 | 338 | 82.6 | 872 | 372 | 99.6 | 1104 | 418 | 110 | 1260 | 499 | 136 |
| 600 | 611 | 415 | 129 | 789 | 437 | 148 | 998 | 560 | 190 | 1146 | 633 | 218 |
| 660 | 555 | 543 | 196 | 717 | 645 | 262 | 907 | 730 | 285 | 1040 | 872 | 349 |
| 730 | 502 | 790 | 388 | 648 | 796 | 388 | 820 | 868 | 422 | 940 | 1055 | 551 |
| 807 | 459 | 990 | 604 | 589 | 1035 | 626 | 746 | 1240 | 777 | 851 | 1387 | 898 |
| 890 | 416 | 1402 | 948 | 534 | 1382 | 947 | 677 | 1648 | 1231 | 772 | 1795 | 1406 |
| 982 | 377 | 1627 | 1389 | 484 | 1604 | 1389 | CONSULT FACTORY | | | CONSULT FACTORY | | |

* Operating speeds above 4000 RPM are not recommended. Consult factory.

BC SWSI Class I

| FAN SIZE | HOUSING | | SHAFT DIAMETER & BEARINGS | | | | BARE FAN WEIGHT (kg) | | |
|----------|------------|-------------|---------------------------|--------------|------------|--------------|----------------------|-------|-------|
| | SIDES (mm) | SCROLL (mm) | ARR 1 & 9 | | ARR 3 | | ARR 1 | ARR 3 | ARR 9 |
| | | | SHAFT DIA. | BEARING TYPE | SHAFT DIA. | BEARING TYPE | | | |
| 122 | 2 | 2 | 25 | B | 25 | B | 54 | 45 | 56 |
| 135 | 2 | 2 | 25 | B | 25 | B | 61 | 55 | 65 |
| 150 | 2 | 2 | 25 | B | 25 | B | 74 | 65 | 78 |
| 165 | 2 | 2 | 25 | B | 25 | B | 87 | 87 | 91 |
| 182 | 2 | 2 | 30 | B | 30 | B | 111 | 96 | 117 |
| 200 | 2 | 2 | 38 | B | 38 | B | 135 | 109 | 141 |
| 222 | 3 | 2 | 38 | B | 38 | B | 176 | 126 | 185 |
| 245 | 3 | 2 | 38 | B | 38 | B | 212 | 154 | 223 |
| 270 | 3 | 2 | 45 | B | 38 | B | 256 | 190 | 269 |
| 300 | 3 | 3 | 50 | B | 45 | B | 308 | 284 | 324 |
| 330 | 3 | 3 | 50 | B | 45 | B | 372 | 400 | 391 |
| 365 | 3 | 3 | 50 | B | 50 | B | 459 | 431 | 481 |
| 402 | 3 | 3 | 55 | B | 50 | B | 609 | 550 | 639 |
| 445 | 3 | 3 | 65 | B | 50 | B | 715 | 695 | 751 |
| 490 | 3 | 3 | 70 | B | 55 | R | 834 | 770 | 875 |
| 542 | 3 | 3 | 75 | B | 65 | R | 1197 | 995 | 1257 |
| 600 | 3 | 3 | 75 | B | 75 | R | 1420 | 1373 | 1491 |
| 660 | 3 | 3 | 90 | R | 75 | R | 1821 | 1750 | 1912 |
| 730 | 3 | 3 | 90 | R | 90 | R | 2255 | 2077 | 2368 |
| 807 | 3 | 3 | 100 | R | 100 | R | 2280 | 2386 | 2394 |
| 890 | 5 | 3 | 100 | R | 100 | R | 3105 | 2864 | 3260 |
| 982 | 5 | 5 | 125 | SR | 125 | SR | 4049 | 3359 | 4251 |

Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

BC SWSI Class II

| FAN SIZE | HOUSING | | SHAFT DIAMETER & BEARINGS | | | | BARE FAN WEIGHT (kg) | | |
|----------|------------|-------------|---------------------------|--------------|------------|--------------|----------------------|-------|-------|
| | SIDES (mm) | SCROLL (mm) | ARR 1 & 9 | | ARR 3 | | ARR 1 | ARR 3 | ARR 9 |
| | | | SHAFT DIA. | BEARING TYPE | SHAFT DIA. | BEARING TYPE | | | |
| 122 | 2 | 2 | 25 | B | 25 | B | 56 | 50 | 59 |
| 135 | 2 | 2 | 25 | B | 25 | B | 64 | 60 | 67 |
| 150 | 2 | 2 | 30 | B | 30 | B | 79 | 71 | 83 |
| 165 | 2 | 2 | 30 | B | 30 | B | 92 | 96 | 97 |
| 182 | 2 | 2 | 38 | B | 38 | B | 119 | 105 | 125 |
| 200 | 2 | 2 | 38 | B | 38 | B | 140 | 120 | 146 |
| 222 | 3 | 2 | 38 | B | 38 | B | 180 | 139 | 189 |
| 245 | 3 | 2 | 45 | B | 45 | B | 222 | 169 | 233 |
| 270 | 3 | 2 | 45 | B | 45 | B | 262 | 210 | 275 |
| 300 | 3 | 3 | 50 | B | 50 | B | 315 | 312 | 331 |
| 330 | 3 | 3 | 55 | B | 55 | B | 389 | 440 | 408 |
| 365 | 3 | 3 | 65 | B | 65 | B | 491 | 474 | 515 |
| 402 | 3 | 3 | 65 | R | 65 | B | 634 | 605 | 666 |
| 445 | 3 | 3 | 70 | R | 70 | R | 745 | 765 | 783 |
| 490 | 3 | 3 | 75 | R | 70 | R | 870 | 848 | 913 |
| 542 | 3 | 3 | 90 | R | 75 | R | 1255 | 1095 | 1318 |
| 600 | 3 | 3 | 90 | R | 90 | R | 1471 | 1510 | 1545 |
| 660 | 3 | 3 | 100 | R | 100 | R | 1911 | 1925 | 2007 |
| 730 | 3 | 3 | 100 | R | 100 | R | 2333 | 2285 | 2450 |
| 807 | 3 | 3 | 115 | SR | 115 | SR | 2381 | 2625 | 2500 |
| 890 | 5 | 3 | 125 | SR | 125 | SR | 3271 | 3150 | 3435 |
| 982 | 5 | 5 | enq | SR | enq | SR | 4154 | 3695 | 4361 |

Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

BC SWSI Class III

| FAN SIZE | HOUSING | | SHAFT DIAMETER & BEARINGS | | | | BARE FAN WEIGHT (kg) | | |
|----------|------------|-------------|---------------------------|--------------|------------|--------------|----------------------|-------|-------|
| | SIDES (mm) | SCROLL (mm) | ARR 1 & 9 | | ARR 3 | | ARR 1 | ARR 3 | ARR 9 |
| | | | SHAFT DIA. | BEARING TYPE | SHAFT DIA. | BEARING TYPE | | | |
| 122 | 3 | 3 | 38 | B | 38 | B | 63 | 89 | 66 |
| 135 | 3 | 3 | 38 | B | 38 | B | 72 | 101 | 76 |
| 150 | 3 | 3 | 45 | B | 45 | B | 90 | 125 | 95 |
| 165 | 3 | 3 | 45 | B | 45 | B | 102 | 165 | 107 |
| 182 | 3 | 3 | 45 | B | 45 | B | 133 | 179 | 140 |
| 200 | 3 | 3 | 50 | B | 45 | B | 156 | 197 | 164 |
| 222 | 3 | 3 | 50 | B | 50 | R | 201 | 217 | 211 |
| 245 | 5 | 5 | 55 | B | 50 | R | 282 | 245 | 296 |
| 270 | 5 | 5 | 55 | B | 50 | R | 336 | 290 | 353 |
| 300 | 5 | 5 | 65 | R | 55 | R | 432 | 468 | 453 |
| 330 | 5 | 5 | 70 | R | 65 | R | 526 | 476 | 552 |
| 365 | 5 | 5 | 70 | R | 65 | R | 630 | 658 | 662 |
| 402 | 5 | 5 | 75 | R | 70 | R | 781 | 820 | 820 |
| 445 | 5 | 5 | 90 | R | 75 | R | 960 | 1017 | 1008 |
| 490 | 5 | 5 | 90 | R | 75 | R | 1126 | 1156 | 1183 |
| 542 | 5 | 5 | 100 | R | 90 | R | 1595 | 1475 | 1675 |
| 600 | 5 | 5 | 115 | SR | 100 | R | 2013 | 2017 | 2114 |
| 660 | 5 | 5 | 115 | SR | 100 | R | 2401 | 2692 | 2521 |
| 730 | 5 | 5 | 125 | SR | 115 | SR | 2893 | 3146 | 3038 |
| 807 | 5 | 5 | 125 | SR | 125 | SR | 2898 | 3630 | 3043 |
| 890 | 5 | 5 | enq | SR | enq | SR | 3483 | 4325 | 3657 |

Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

BC SWSI Class IV

| FAN SIZE | HOUSING | | SHAFT DIAMETER & BEARINGS | | | | BARE FAN WEIGHT (kg) | | |
|----------|------------|-------------|---------------------------|--------------|------------|--------------|----------------------|-------|-------|
| | SIDES (mm) | SCROLL (mm) | ARR 1 & 9 | | ARR 3 | | ARR 1 | ARR 3 | ARR 9 |
| | | | SHAFT DIA. | BEARING TYPE | SHAFT DIA. | BEARING TYPE | | | |
| 122 | 5 | 5 | 45 | B | 45 | B | 80 | 95 | 84 |
| 135 | 5 | 5 | 45 | B | 45 | B | 92 | 113 | 96 |
| 150 | 5 | 5 | 45 | B | 45 | B | 107 | 140 | 113 |
| 165 | 5 | 5 | 50 | B | 45 | R | 127 | 184 | 133 |
| 182 | 5 | 5 | 50 | B | 45 | R | 173 | 199 | 182 |
| 200 | 5 | 5 | 55 | R | 50 | R | 213 | 219 | 224 |
| 222 | 5 | 5 | 55 | R | 50 | R | 265 | 241 | 278 |
| 245 | 5 | 5 | 65 | R | 55 | R | 317 | 272 | 333 |
| 270 | 5 | 5 | 65 | R | 55 | R | 389 | 323 | 408 |
| 300 | 5 | 5 | 70 | R | 65 | R | 490 | 520 | 515 |
| 330 | 6 | 6 | 75 | R | 70 | R | 669 | 707 | 703 |
| 365 | 6 | 6 | 90 | R | 75 | R | 865 | 732 | 908 |
| 402 | 6 | 6 | 90 | R | 75 | R | 1064 | 912 | 1117 |
| 445 | 6 | 6 | 100 | R | 90 | R | 1330 | 1130 | 1396 |
| 490 | 6 | 6 | 100 | R | 90 | R | 1535 | 1284 | 1611 |
| 542 | 6 | 6 | 115 | SR | 100 | R | 1996 | 1640 | 2096 |
| 600 | 6 | 6 | 125 | SR | 115 | SR | 2410 | 2241 | 2530 |
| 660 | 6 | 6 | 125 | SR | 115 | SR | 2905 | 2991 | 3051 |
| 730 | 6 | 6 | enq | SR | 125 | SR | 3579 | 3495 | 3758 |
| 807 | 6 | 6 | enq | SR | enq | SR | 3525 | 4034 | 3701 |
| 890 | 6 | 6 | enq | SR | enq | SR | 4181 | 4806 | 4390 |

Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

BC DWDI Class I & II

| FAN SIZE | HOUSING | | SHAFT DIAMETER & BEARINGS | | | | | | BARE FAN WEIGHT (kg) | | | |
|----------|------------|-------------|---------------------------|-------|--------------|----------------|-------|--------------|----------------------|----------|---------|----------|
| | SIDES (mm) | SCROLL (mm) | CLASS I | | | CLASS II | | | ARR. 3 | | ARR. 3F | |
| | | | SHAFT DIAMETER | | BEARING TYPE | SHAFT DIAMETER | | BEARING TYPE | CLASS I | CLASS II | CLASS I | CLASS II |
| | | | @ BRG. | @ IMP | | @ BRG. | @ IMP | | | | | |
| 122 | 2 | 2 | 30 | 30 | B | 38 | 38 | B | 63 | 70 | 82 | 90 |
| 135 | 2 | 2 | 30 | 30 | B | 45 | 45 | B | 72 | 79 | 94 | 103 |
| 150 | 2 | 2 | 38 | 38 | B | 45 | 45 | B | 88 | 96 | 114 | 125 |
| 165 | 2 | 2 | 38 | 38 | B | 50 | 50 | B | 101 | 111 | 131 | 144 |
| 182 | 3 | 2 | 45 | 45 | B | 50 | 50 | B | 113 | 124 | 146 | 161 |
| 200 | 3 | 2 | 45 | 45 | B | 55 | 55 | B | 156 | 172 | 203 | 223 |
| 222 | 3 | 2 | 50 | 50 | B | 65 | 65 | B | 205 | 225 | 266 | 293 |
| 245 | 3 | 2 | 55 | 55 | B | 65 | 65 | B | 231 | 255 | 301 | 331 |
| 270 | 3 | 2 | 55 | 55 | B | 70 | 70 | R | 290 | 320 | 378 | 415 |
| 300 | 3 | 3 | 65 | 65 | B | 70 | 75 | R | 407 | 448 | 529 | 582 |
| 330 | 3 | 3 | 65 | 65 | B | 70 | 90 | R | 461 | 508 | 600 | 660 |
| 365 | 3 | 3 | 70 | 70 | B | 70 | 90 | R | 615 | 676 | 799 | 879 |
| 402 | 3 | 3 | 70 | 75 | R | 70 | 90 | R | 768 | 845 | 999 | 1099 |
| 445 | 3 | 3 | 70 | 90 | R | 75 | 100 | R | 955 | 1050 | 1241 | 1365 |
| 490 | 3 | 3 | 70 | 90 | R | 90 | 100 | R | 1050 | 1155 | 1365 | 1501 |
| 542 | 3 | 3 | 75 | 100 | R | 90 | 115 | R | 1339 | 1473 | 1741 | 1915 |
| 600 | 3 | 3 | 90 | 115 | R | 100 | 125 | R | 1886 | 2075 | — | — |
| 660 | 3 | 3 | 90 | 115 | R | 100 | 125 | R | 2409 | 2650 | — | — |
| 730 | 3 | 3 | 100 | 125 | R | 100 | enq | R | 2773 | 3050 | — | — |
| 807 | 3 | 3 | 100 | enq | R | 115 | enq | SR | 3445 | 3790 | — | — |
| 890 | 5 | 3 | 115 | enq | R | 115 | enq | SR | 4136 | 4550 | — | — |
| 982 | 5 | 5 | 125 | enq | SR | enq | enq | SR | 5024 | 5526 | — | — |

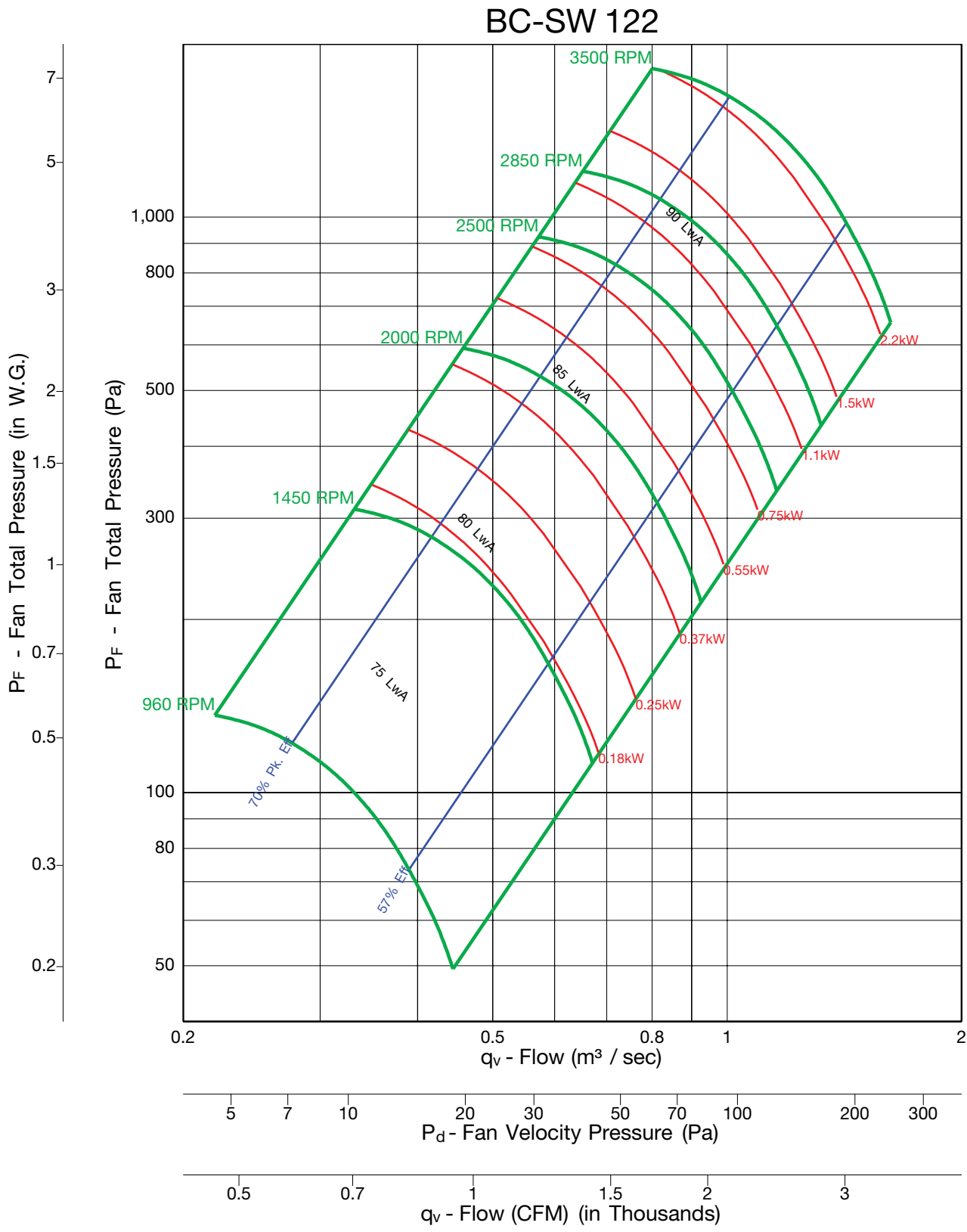
Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

BC DWDI Class III & IV

| FAN SIZE | HOUSING (mm) | | | | SHAFT DIAMETER & BEARINGS | | | | | | BARE FAN WEIGHT (kg) | |
|----------|--------------|--------|----------|--------|---------------------------|-------|--------------|----------|-------|--------------|----------------------|----------|
| | CLASS III | | CLASS IV | | CLASS III | | | CLASS IV | | | ARR. 3 | |
| | SIDES | SCROLL | SIDES | SCROLL | @ BRG. | @ IMP | BEARING TYPE | @ BRG. | @ IMP | BEARING TYPE | CLASS III | CLASS IV |
| 122 | | | | | | | | | | | | |
| 135 | | | | | | | | | | | | |
| 150 | | | | | | | | | | | | |
| 165 | | | | | | | | | | | | |
| 182 | 3 | 3 | 5 | 5 | 55 | 55 | R | 65 | 65 | R | 211 | 235 |
| 200 | 3 | 3 | 5 | 5 | 65 | 65 | R | 55 | 75 | SR | 285 | 317 |
| 222 | 3 | 3 | 5 | 5 | 65 | 65 | R | 65 | 90 | SR | 364 | 405 |
| 245 | 5 | 5 | 5 | 5 | 65 | 75 | R | 70 | 100 | SR | 402 | 446 |
| 270 | 5 | 5 | 5 | 5 | 70 | 90 | R | 75 | 100 | SR | 491 | 545 |
| 300 | 5 | 5 | 5 | 5 | 70 | 90 | R | 75 | 115 | SR | 670 | 744 |
| 330 | 5 | 5 | 6 | 6 | 75 | 90 | R | 90 | 125 | SR | 739 | 821 |
| 365 | 5 | 5 | 6 | 6 | 75 | 100 | R | 90 | 125 | SR | 929 | 1032 |
| 402 | 5 | 5 | 6 | 6 | 90 | 100 | R | 100 | enq | SR | 1161 | 1290 |
| 445 | 5 | 5 | 6 | 6 | 90 | 115 | R | 100 | enq | SR | 1443 | 1604 |
| 490 | 5 | 5 | 6 | 6 | 100 | 125 | R | 115 | enq | SR | 1578 | 1754 |
| 542 | 5 | 5 | 6 | 6 | 100 | enq | R | 115 | enq | SR | 2000 | 2223 |
| 600 | 5 | 5 | 6 | 6 | 115 | enq | SR | 125 | enq | SR | 2813 | 3126 |
| 660 | 5 | 5 | 6 | 6 | 125 | enq | SR | enq | enq | SR | 3685 | 4095 |
| 730 | 5 | 5 | 6 | 6 | 125 | enq | SR | enq | enq | SR | 4242 | 4714 |
| 807 | 5 | 5 | 6 | 6 | — | — | SR | — | — | SR | 5271 | 5857 |
| 890 | 5 | 5 | 6 | 6 | — | — | SR | — | — | SR | 6328 | 7032 |
| 982 | 5 | 5 | 6 | 6 | — | — | — | — | — | — | — | — |

Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



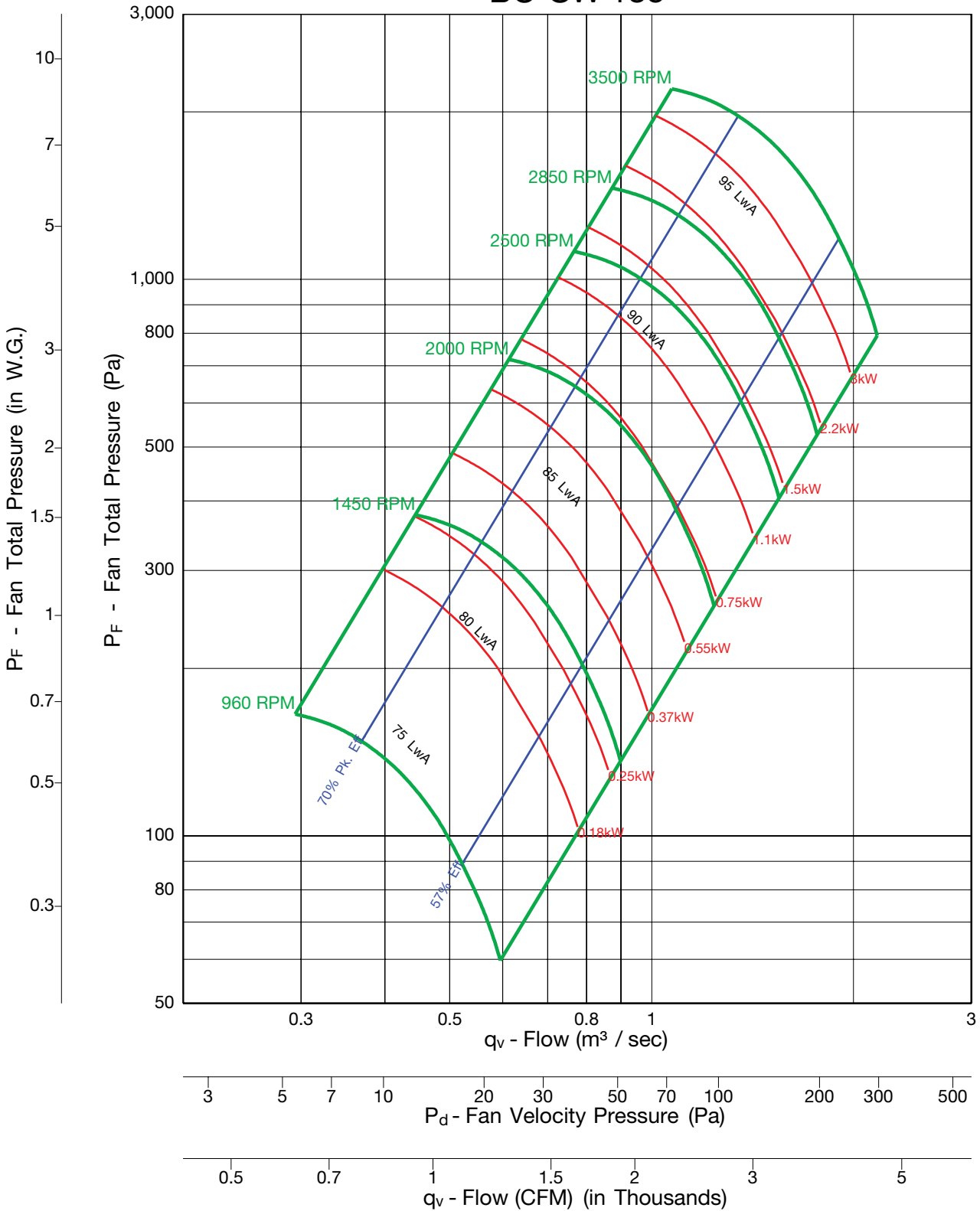
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-SW 135

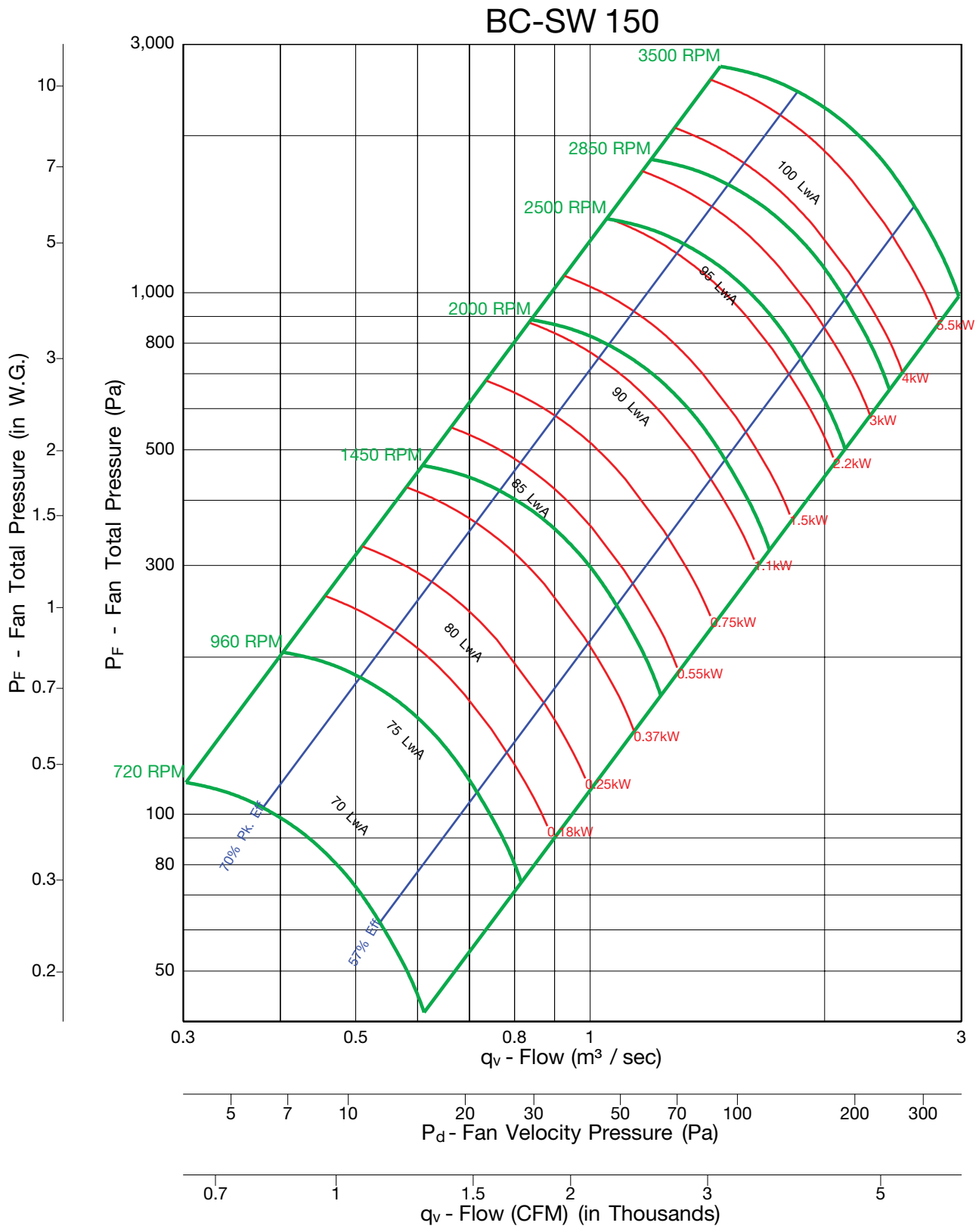


Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwIA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

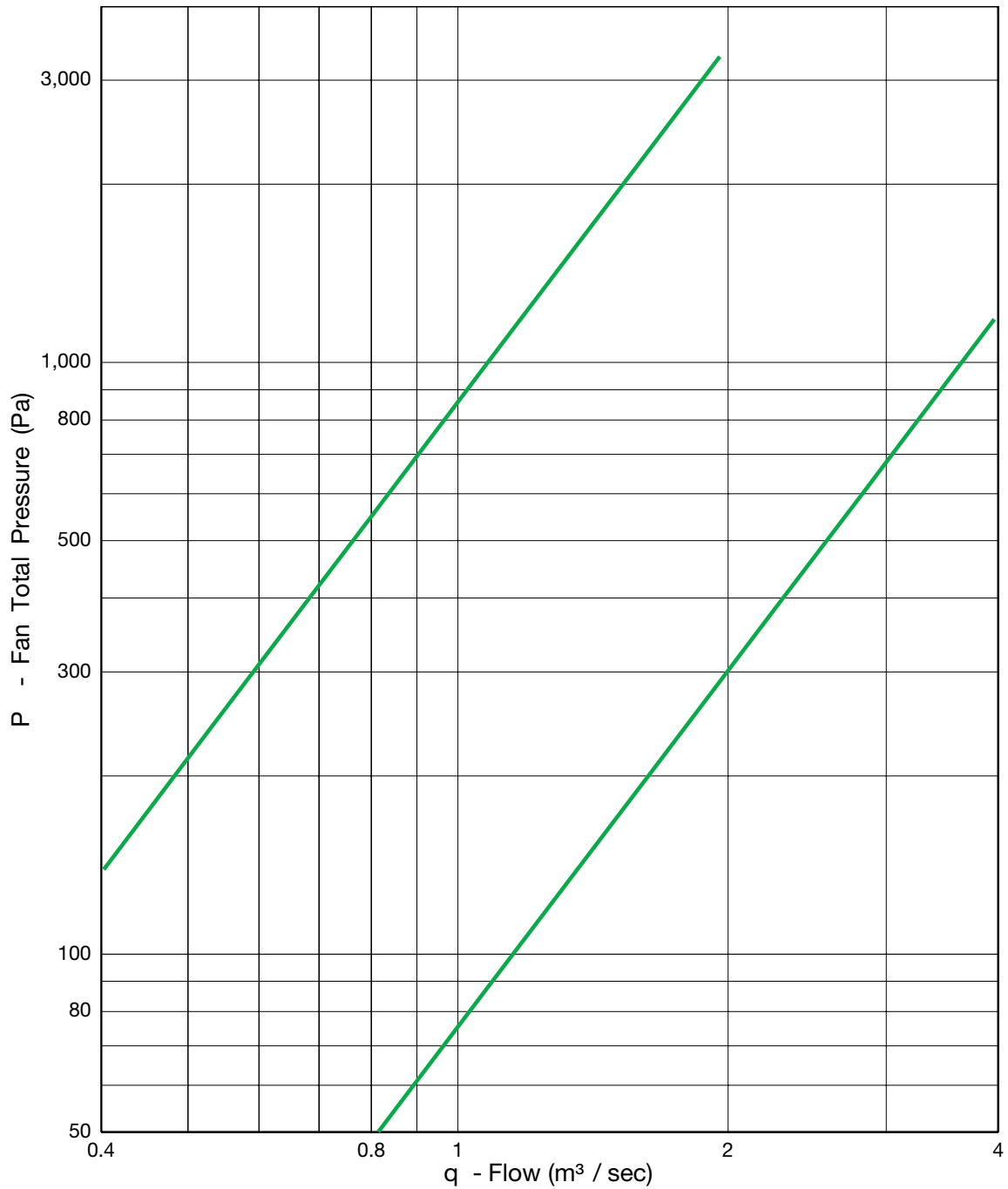


Fan Efficiency Grade = FEG 75



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

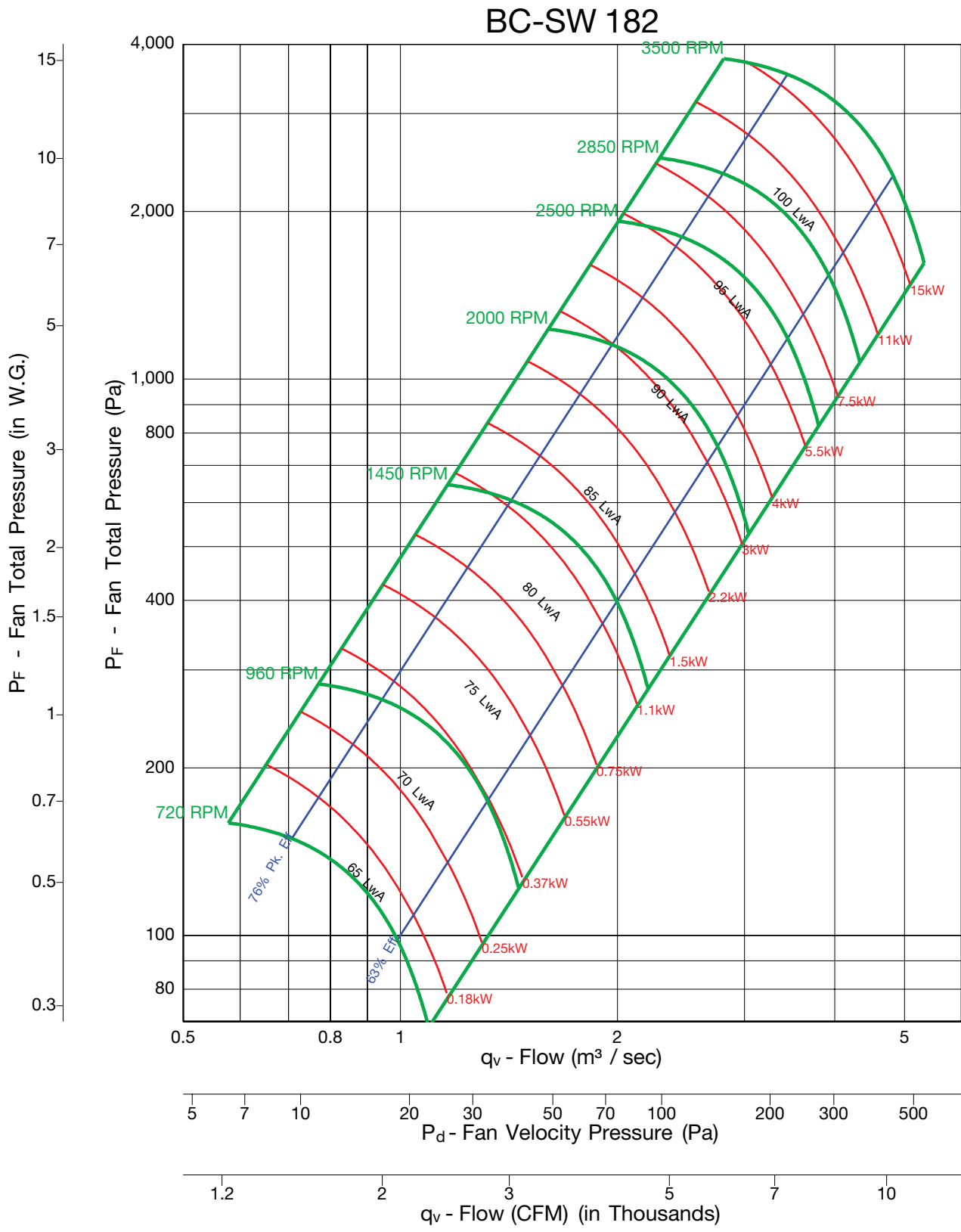


Fan Efficiency Grade = FEG 75



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwIA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



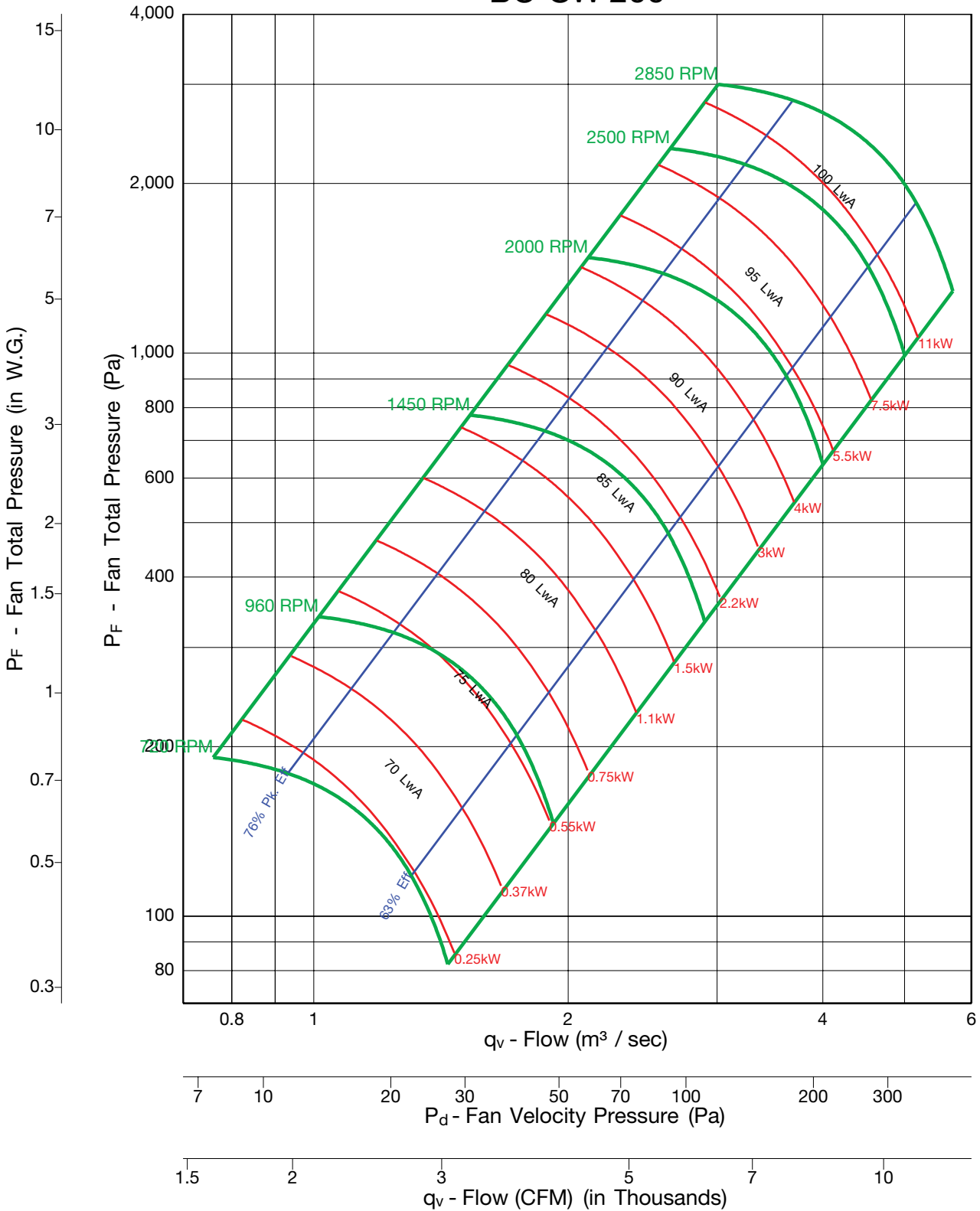
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-SW 200

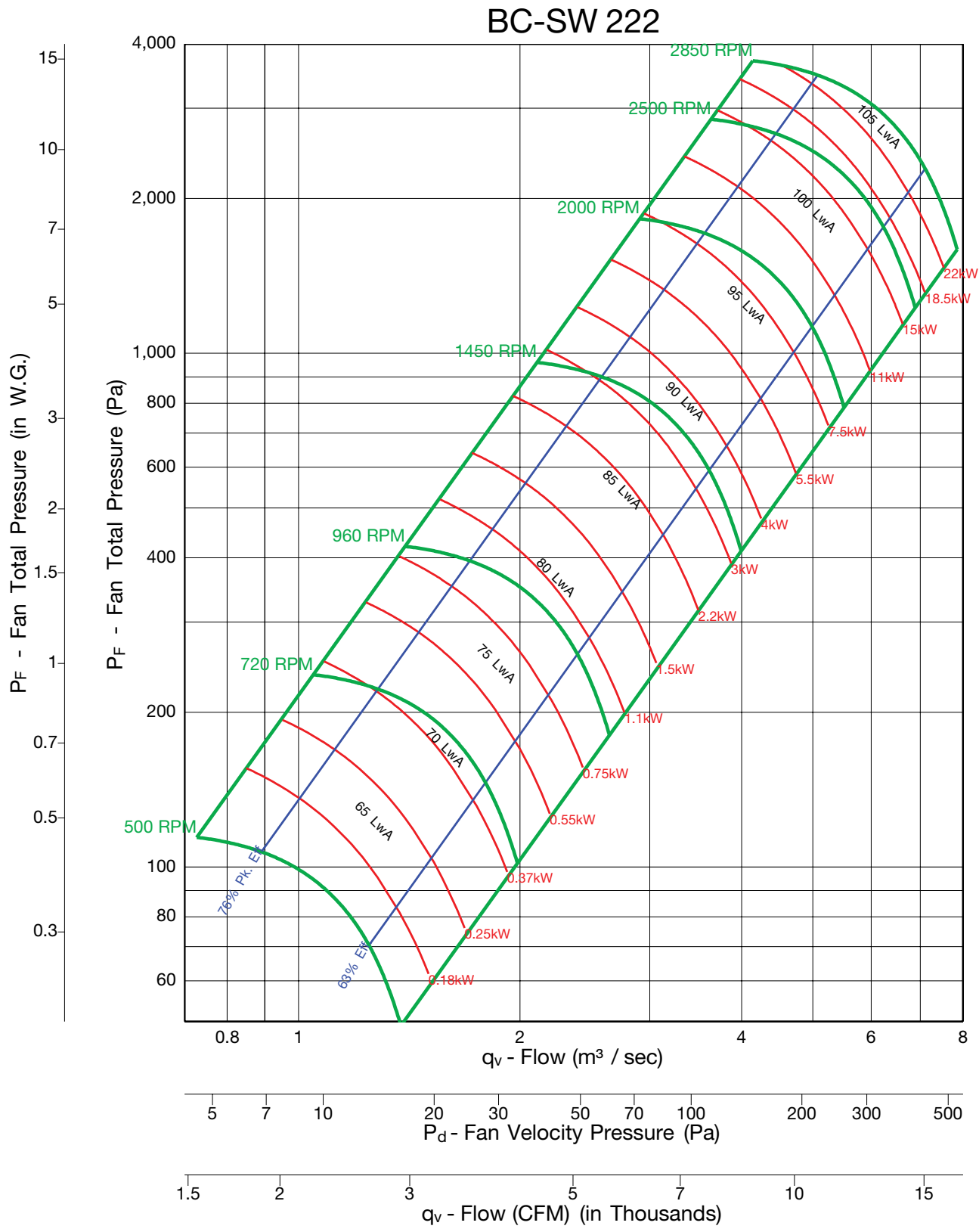


Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

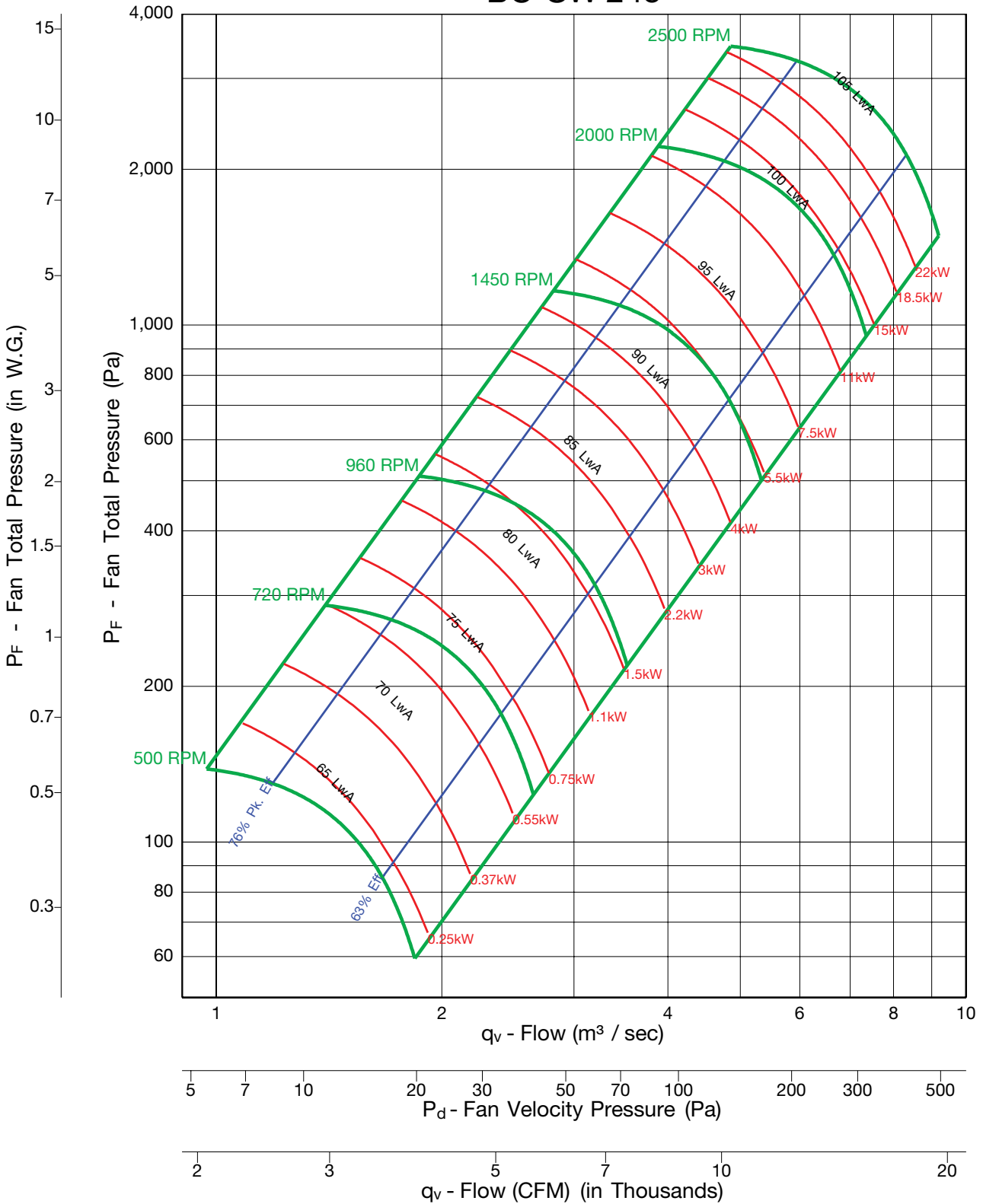


Fan Efficiency Grade = FEG 80



- Notes:**
1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
 2. Power rating (kW) does not include transmission losses.
 3. Performance ratings do not include the effects of appurtenances (accessories).
 4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
 5. Values shown are for inlet LwIA sound power levels for Installation Type B: Free inlet, ducted outlet.
 6. Ratings do not include the effects of duct end correction.
 7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-SW 245

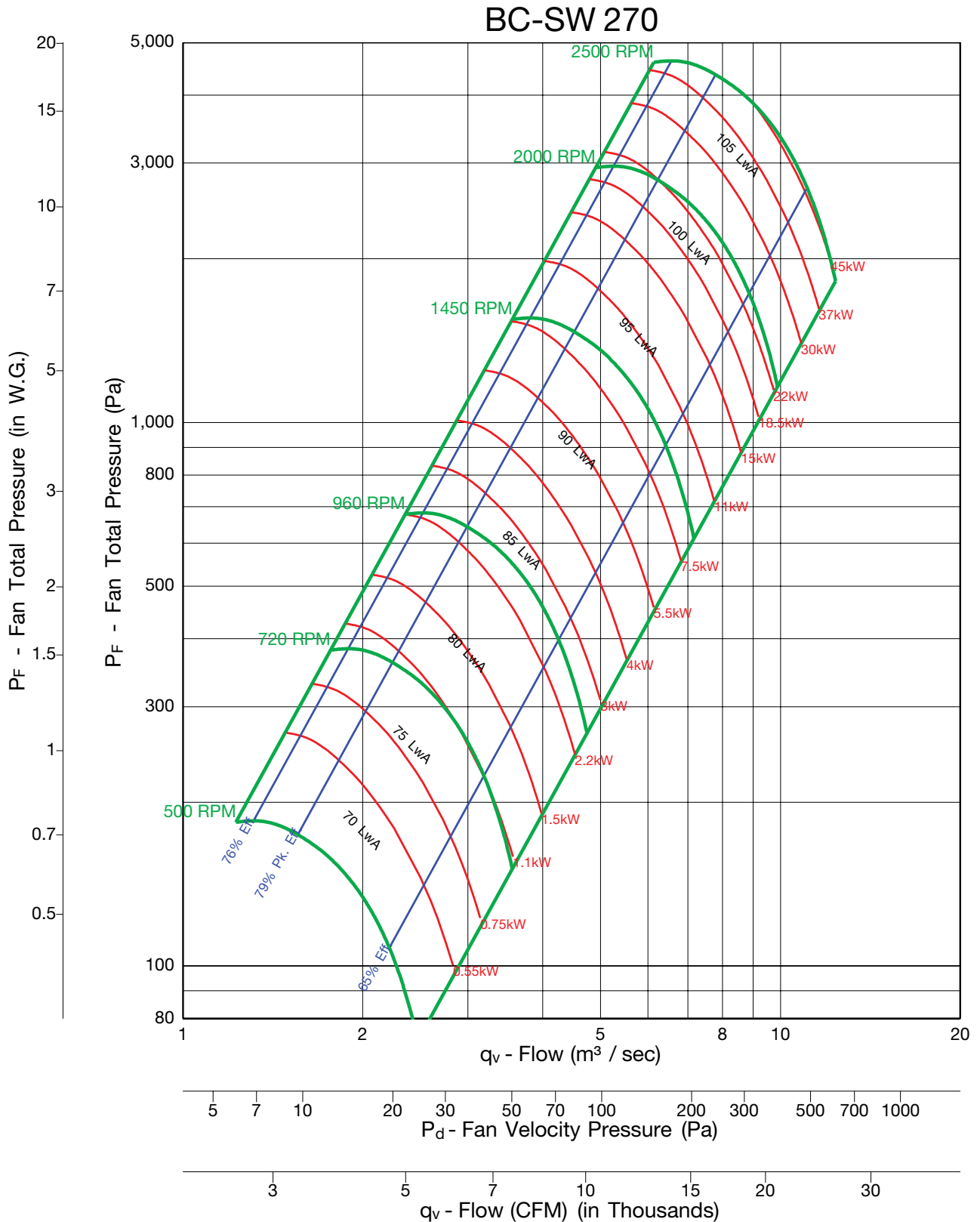


Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



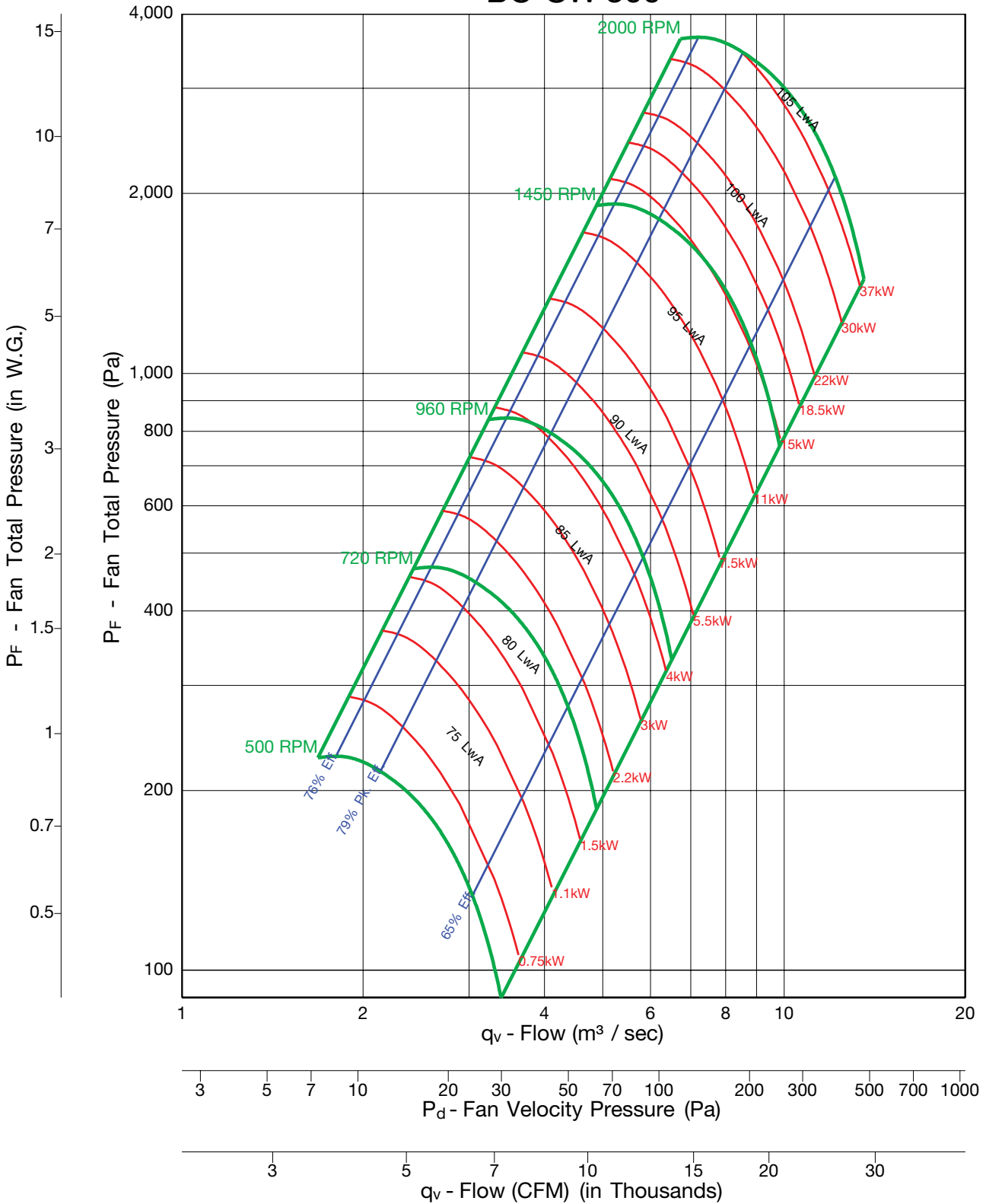
Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-SW 300

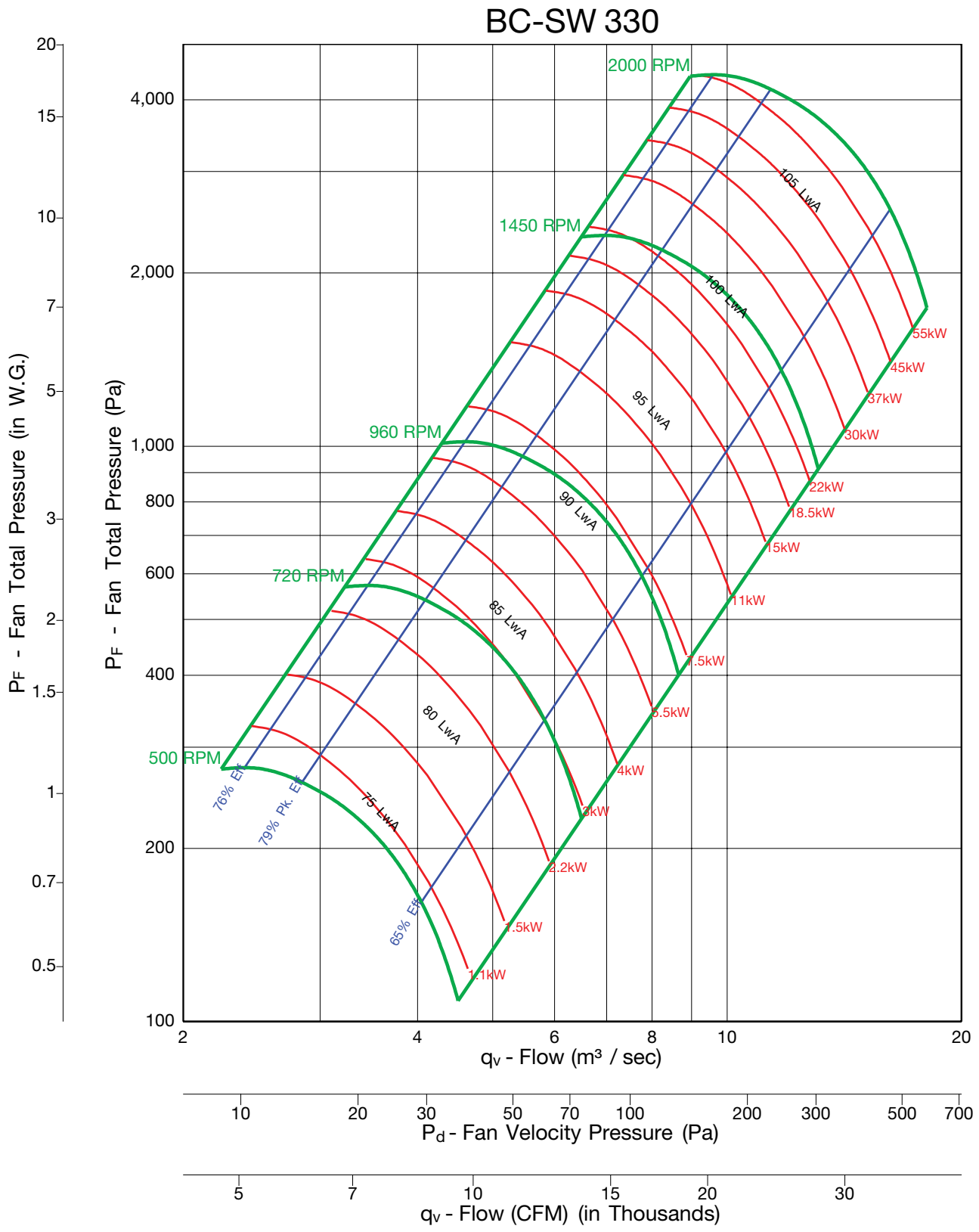


Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



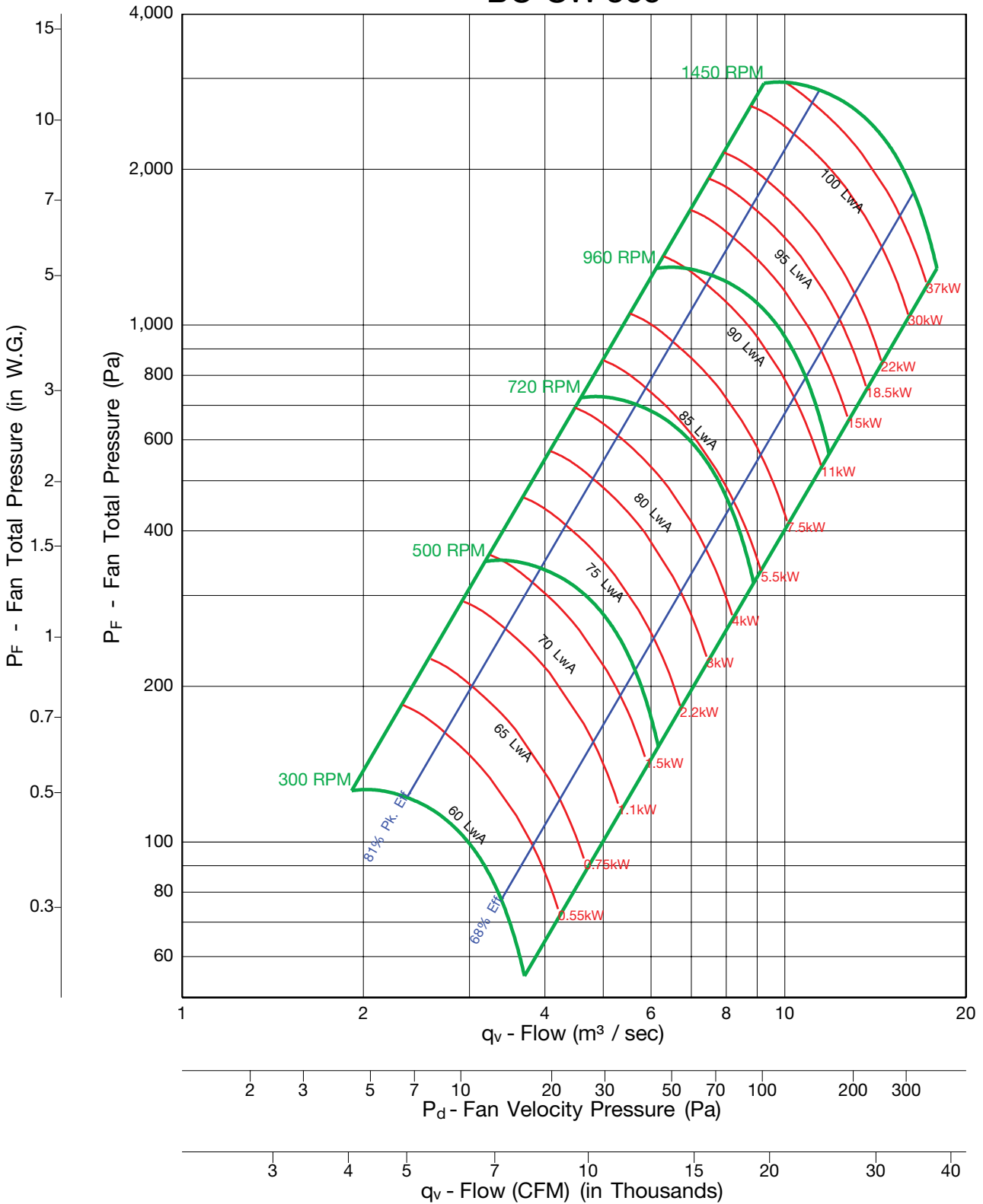
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-SW 365

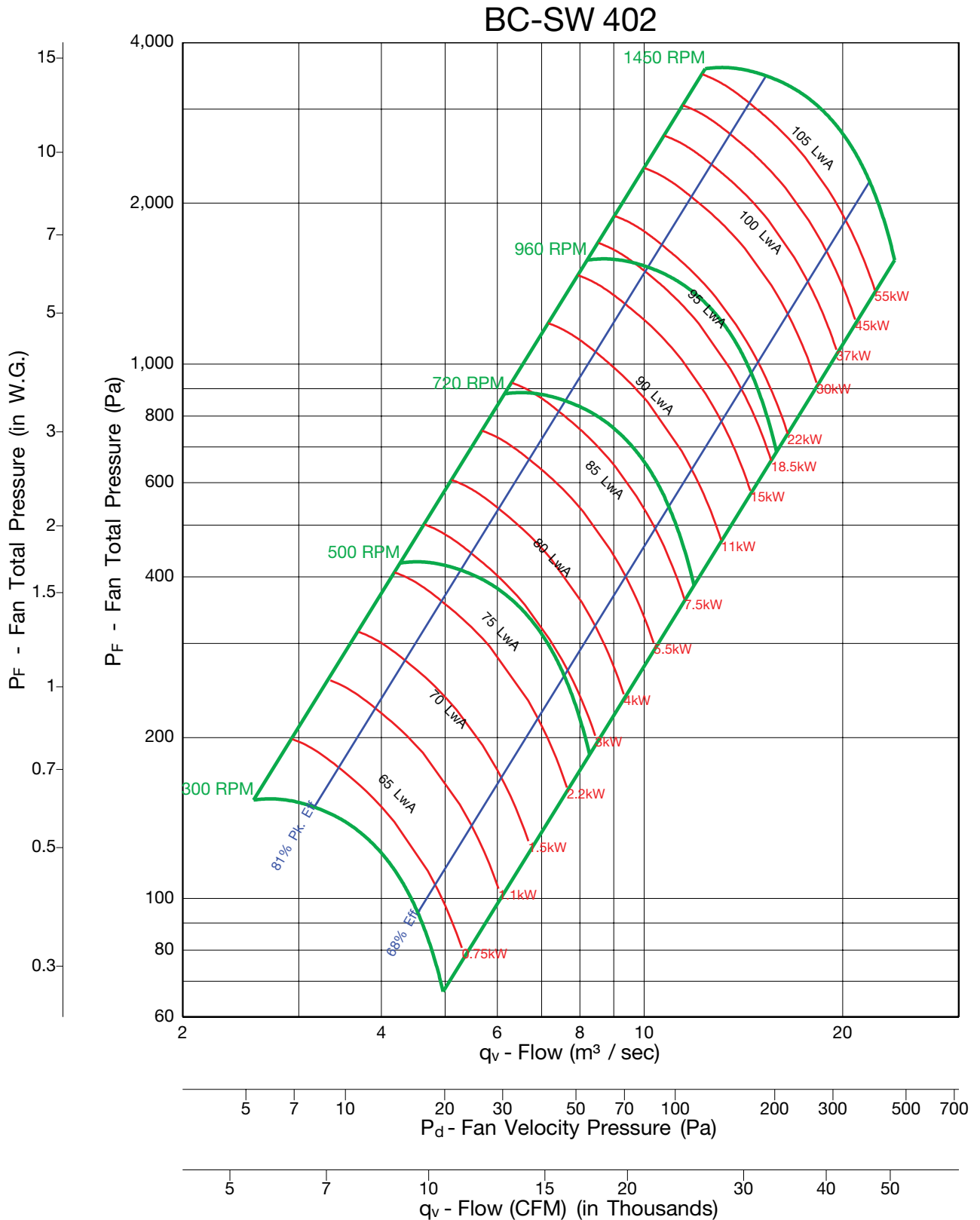


Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



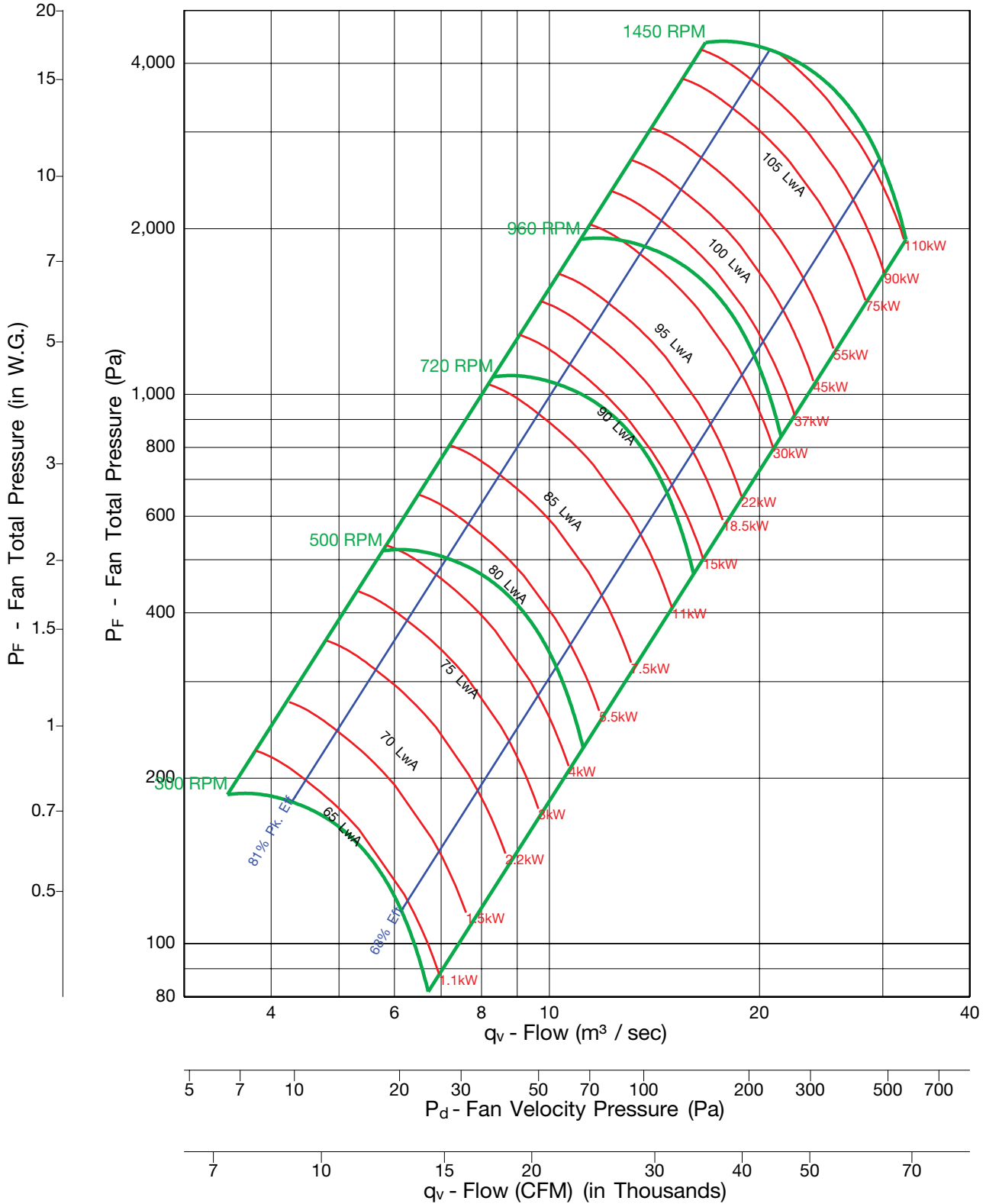
Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-SW 445



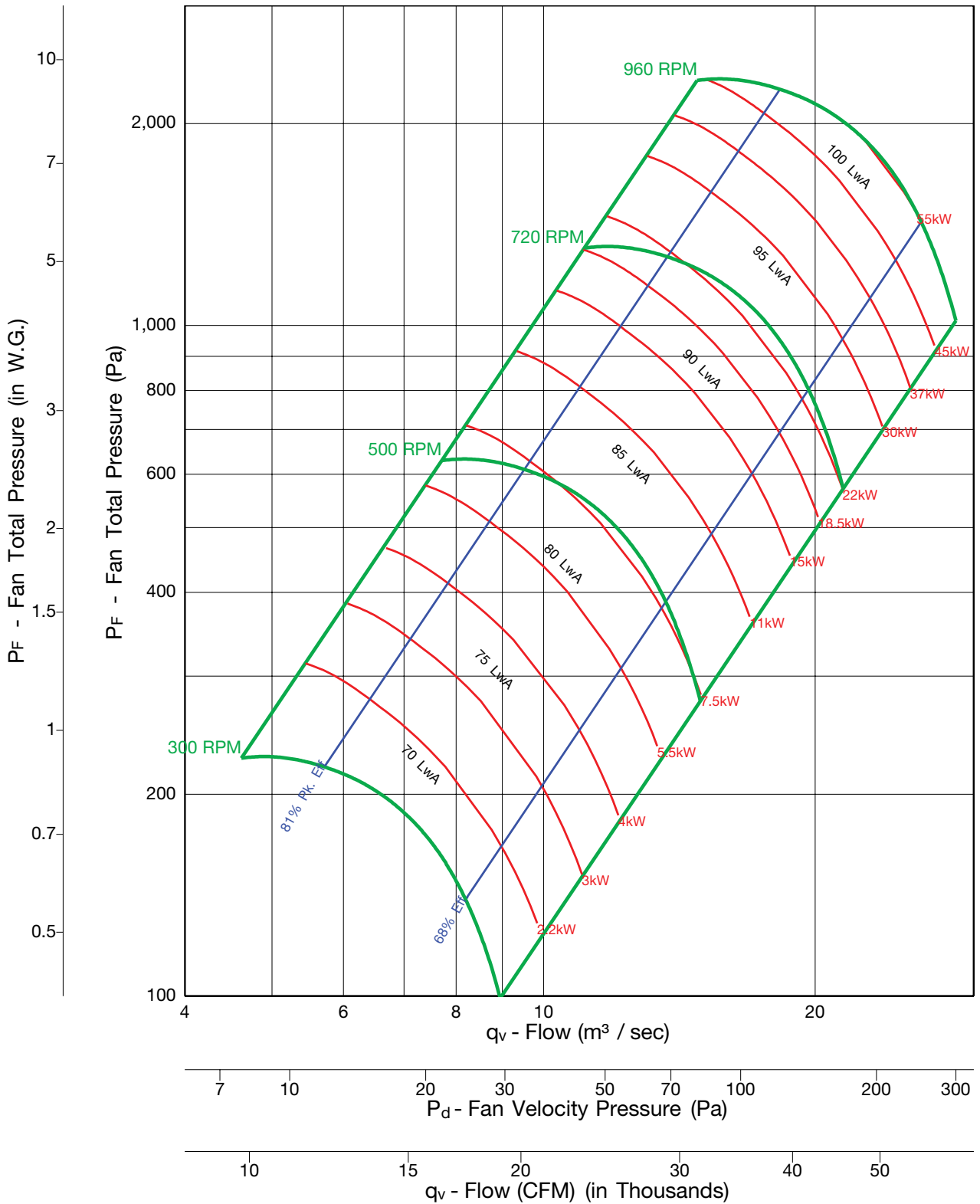
Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-SW 490



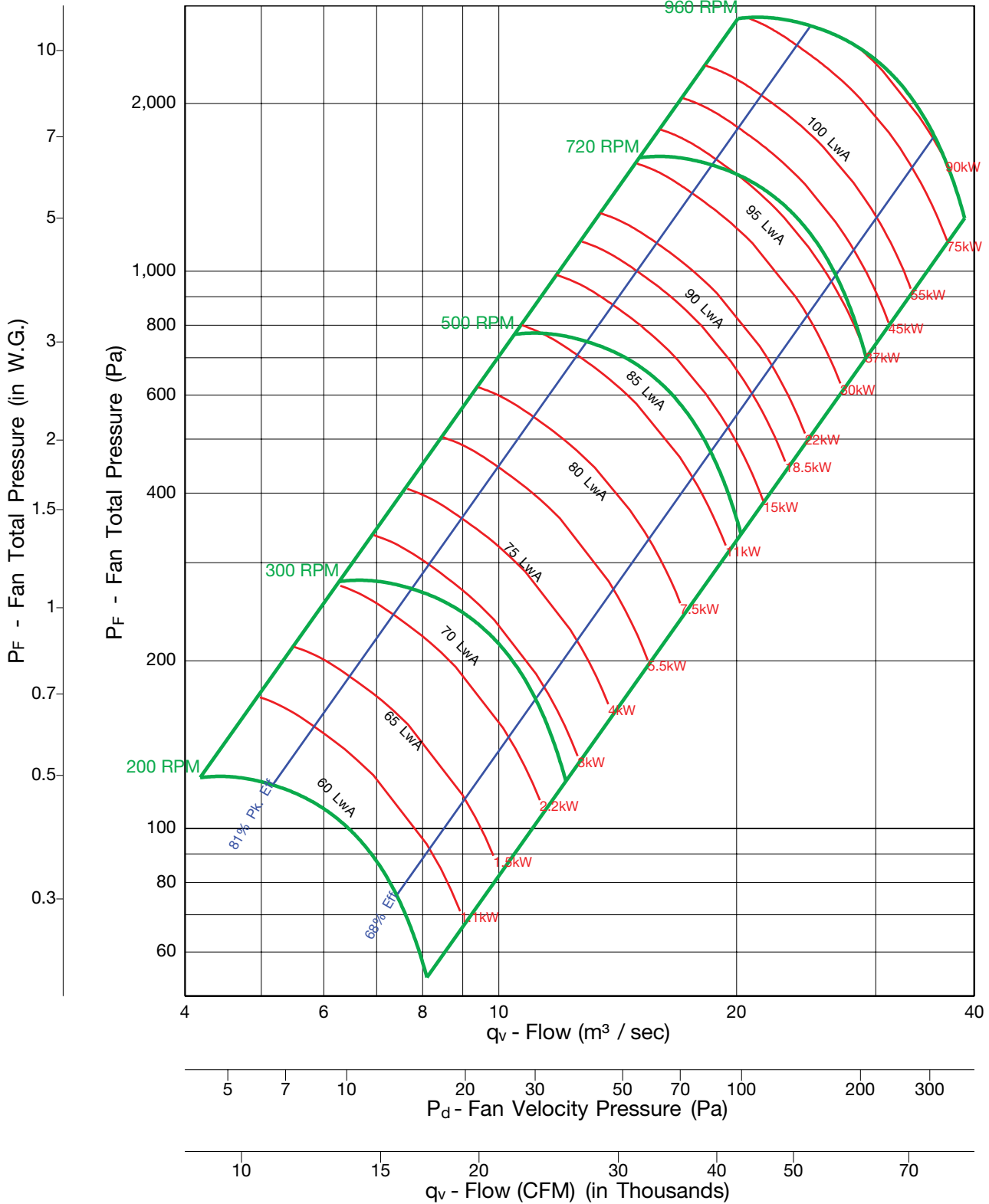
Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-SW 542

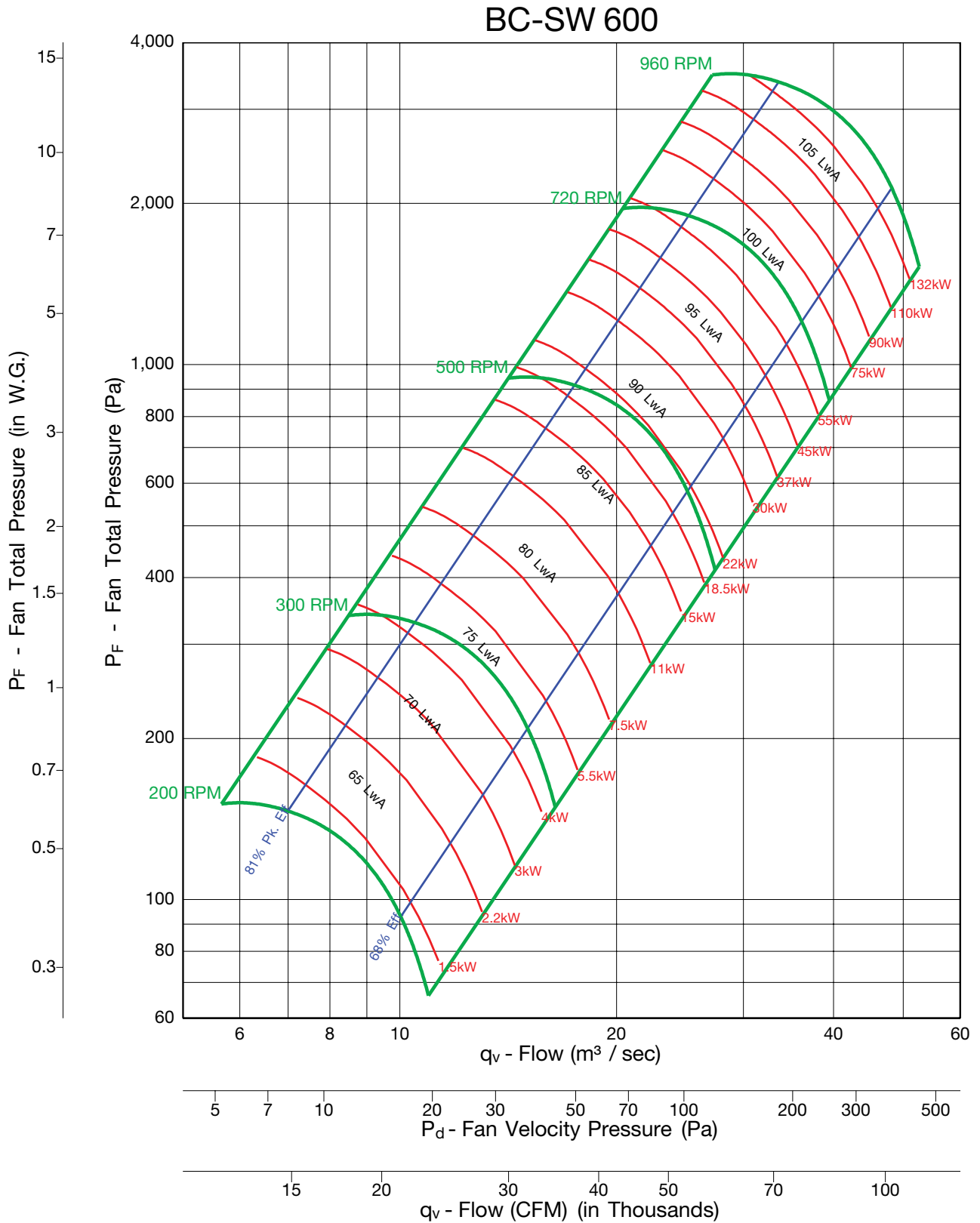


Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



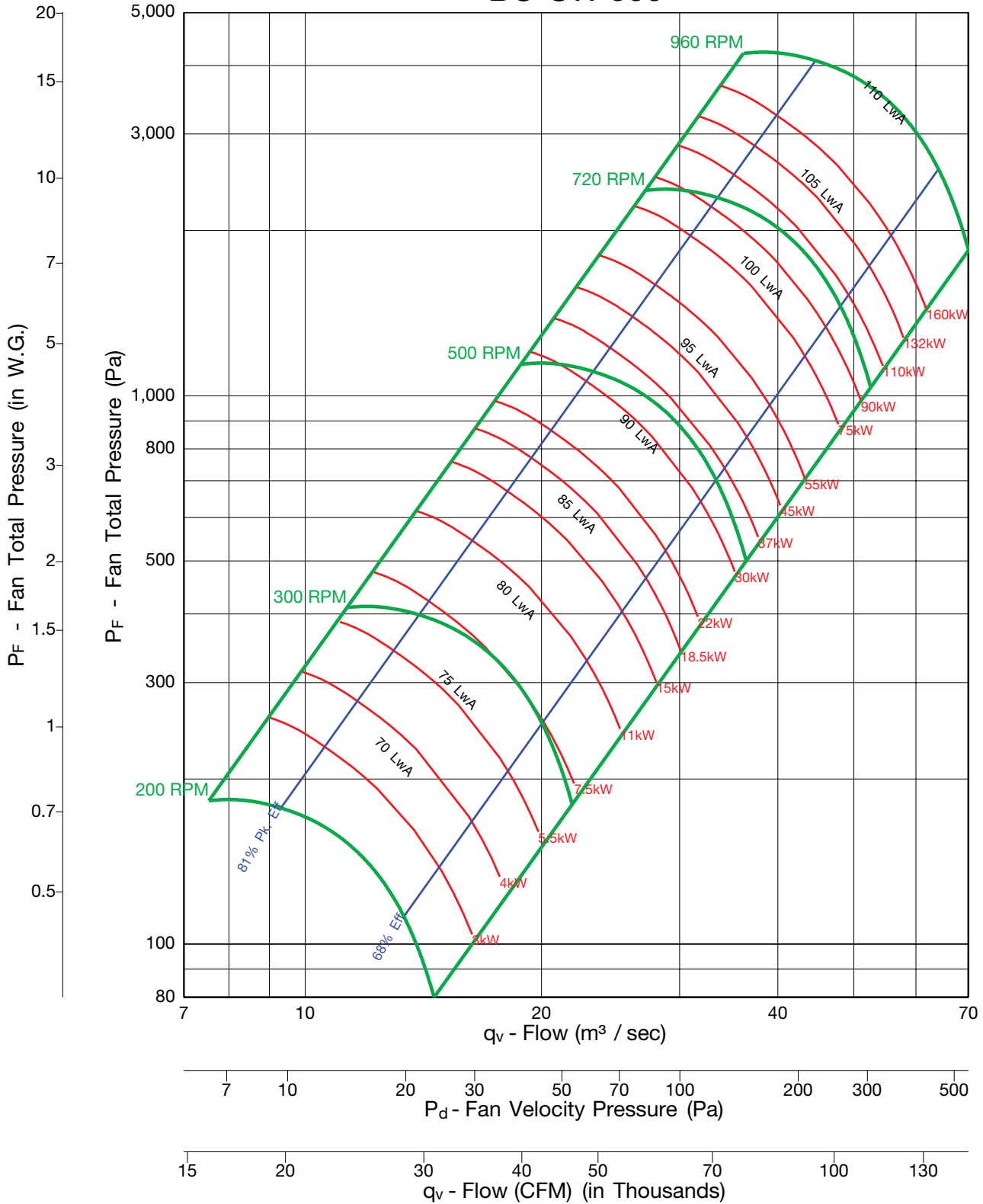
Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-SW 660

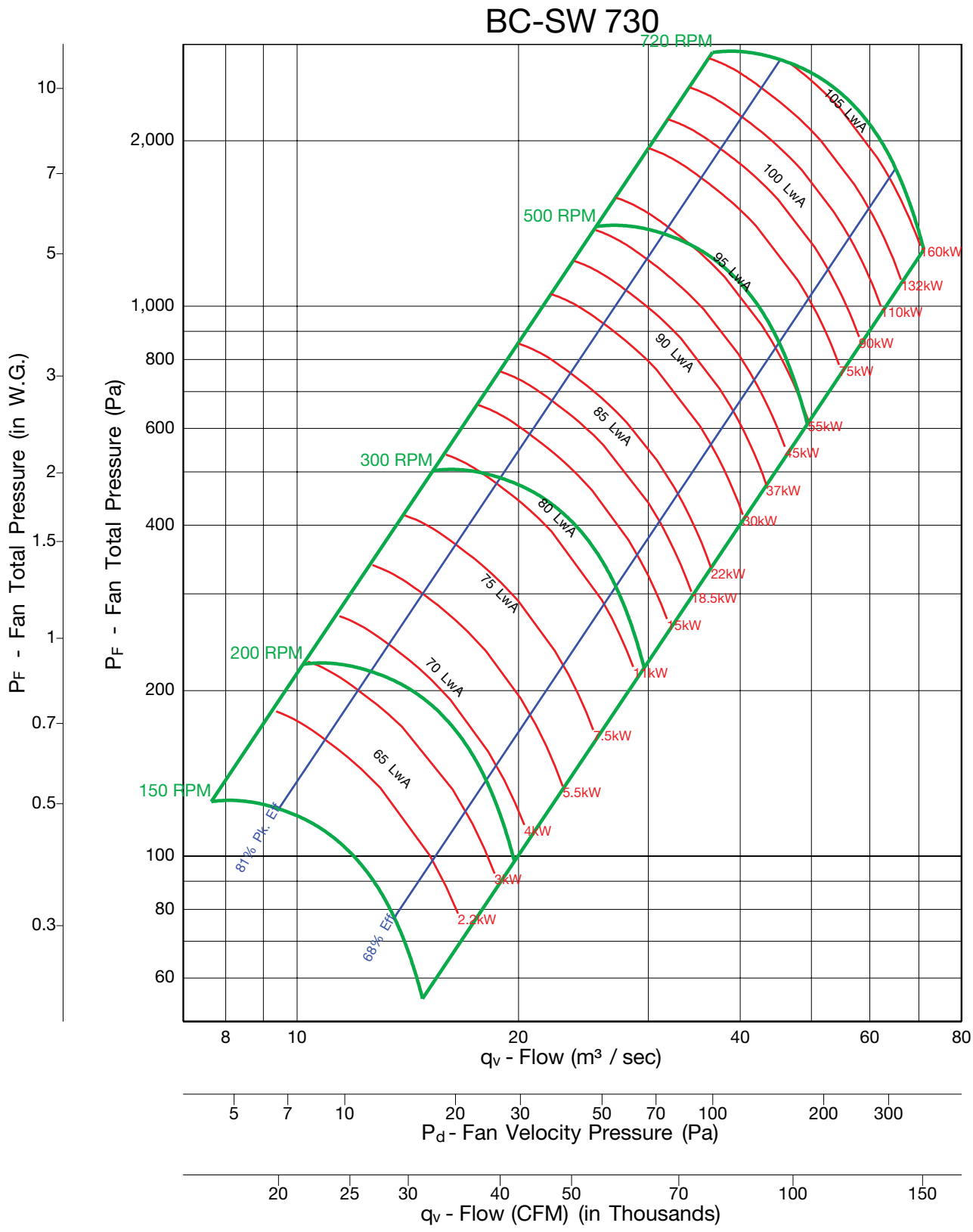


Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



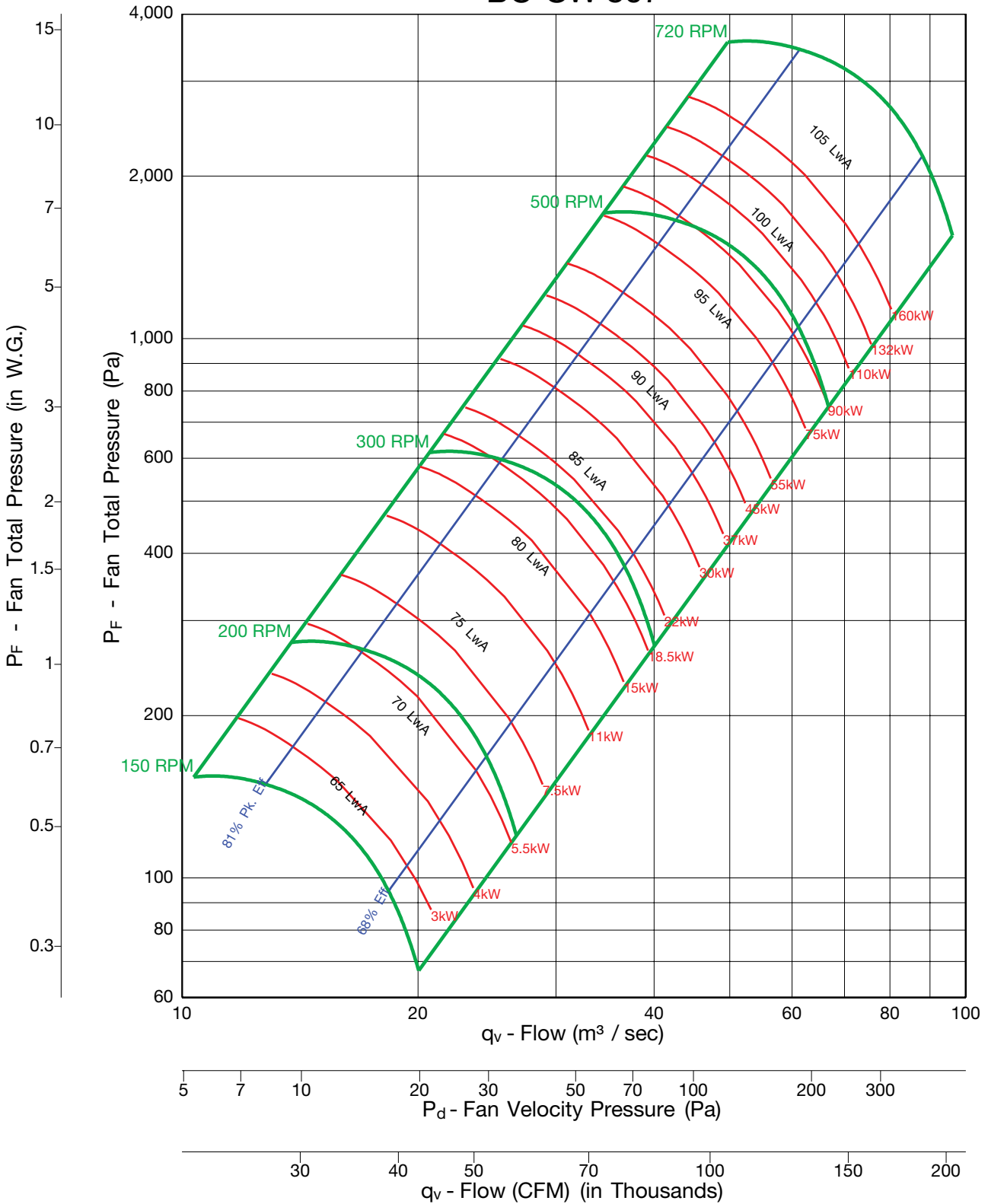
Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-SW 807

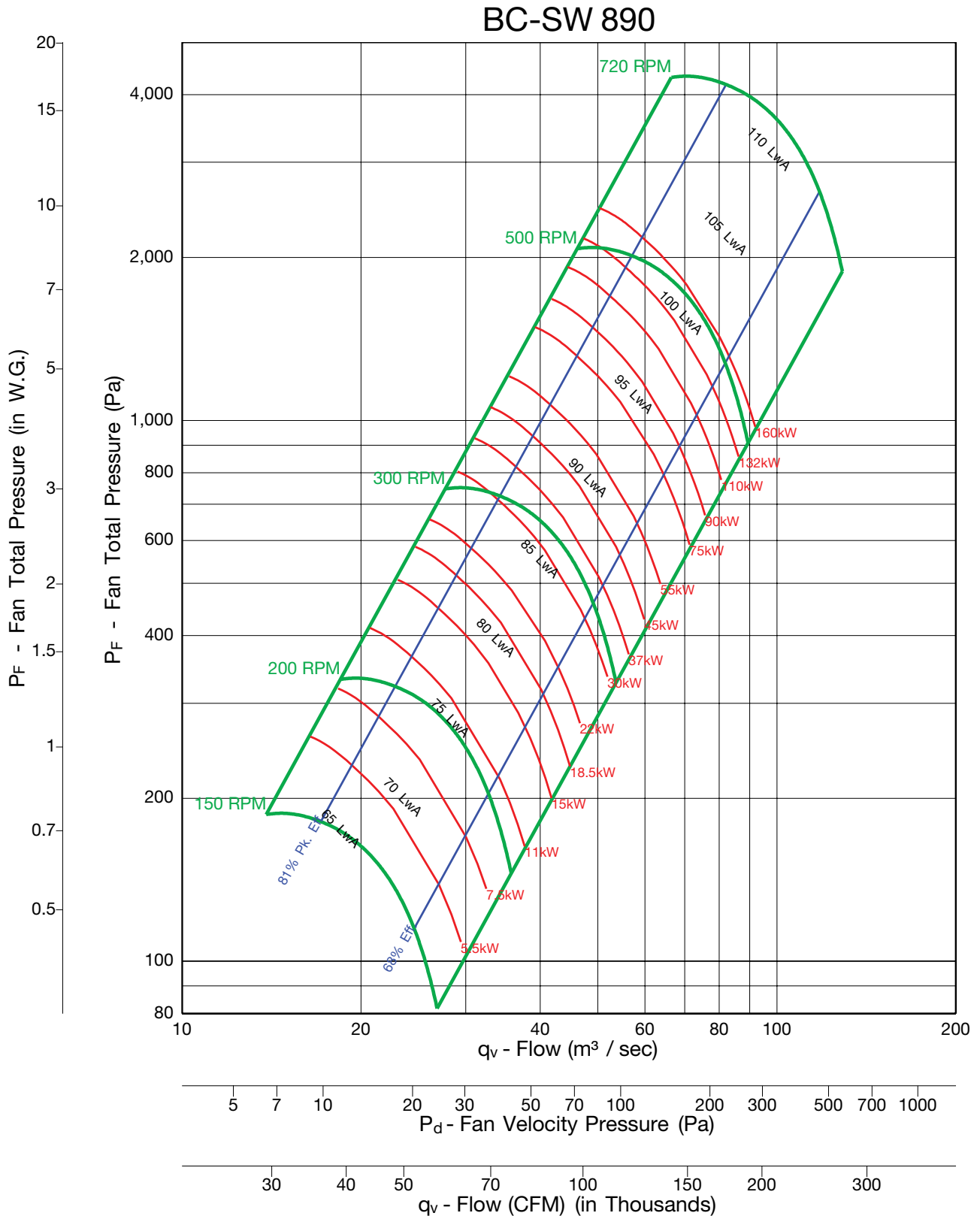


Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



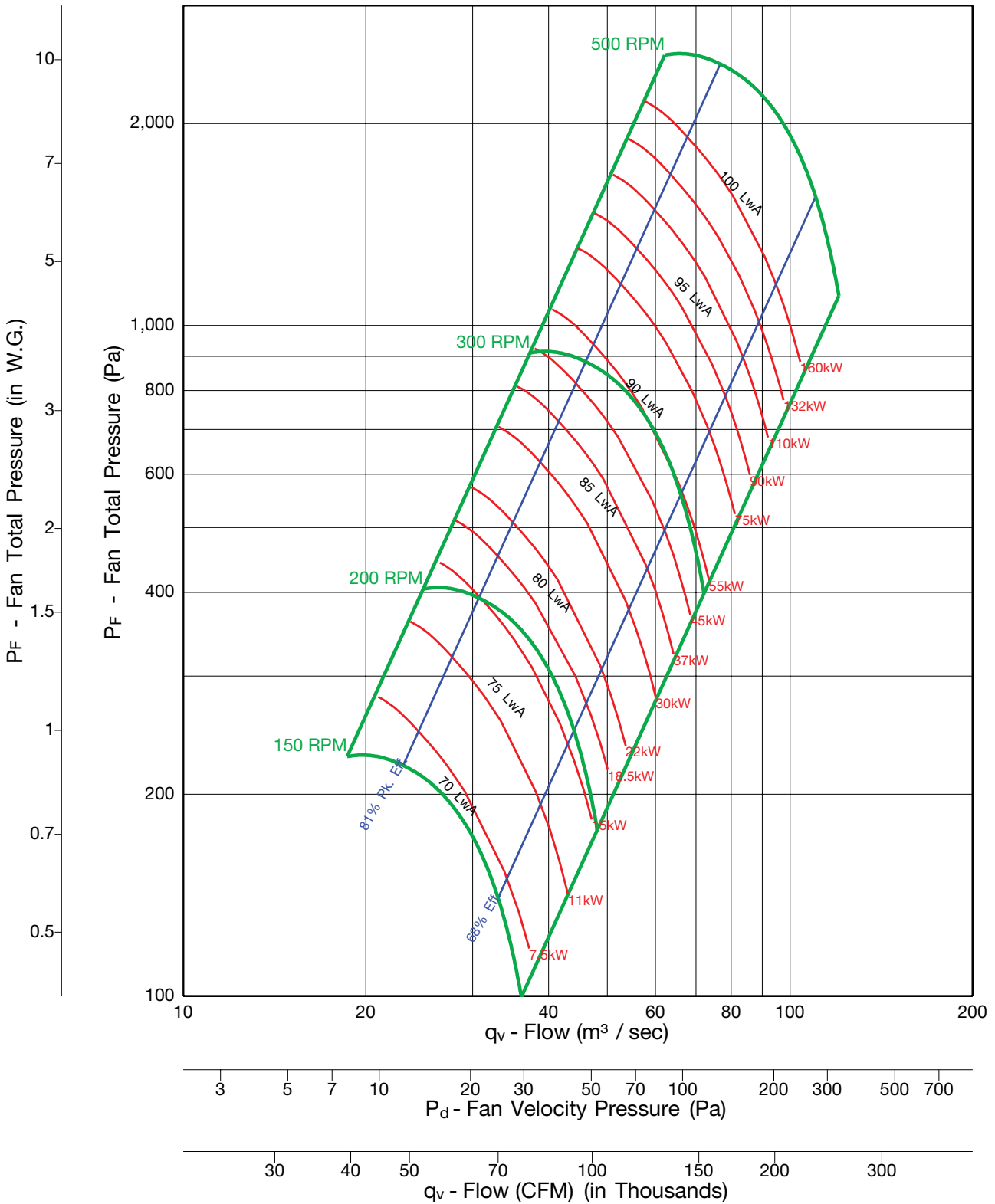
Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-SW 982

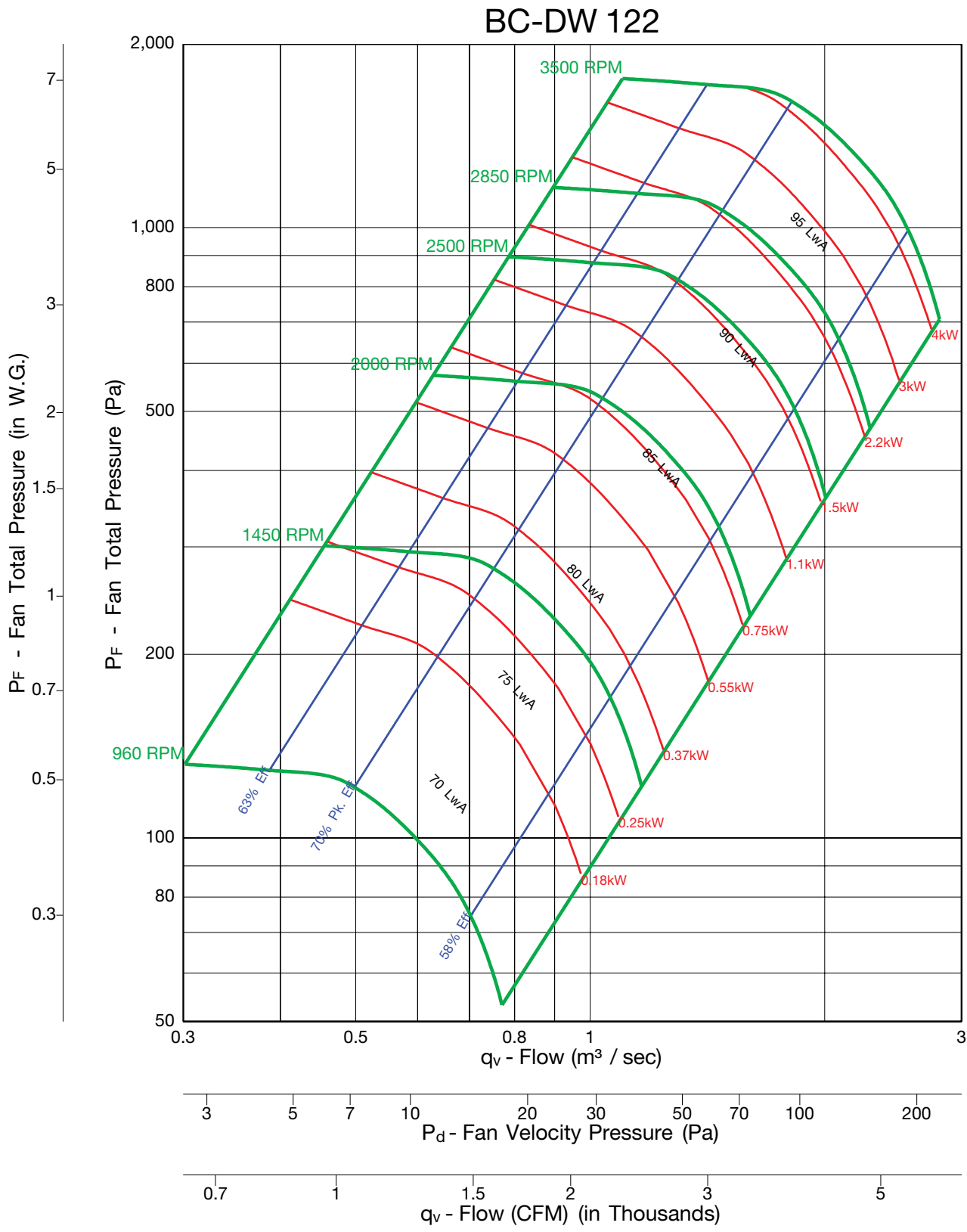


Fan Efficiency Grade = FEG 85



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



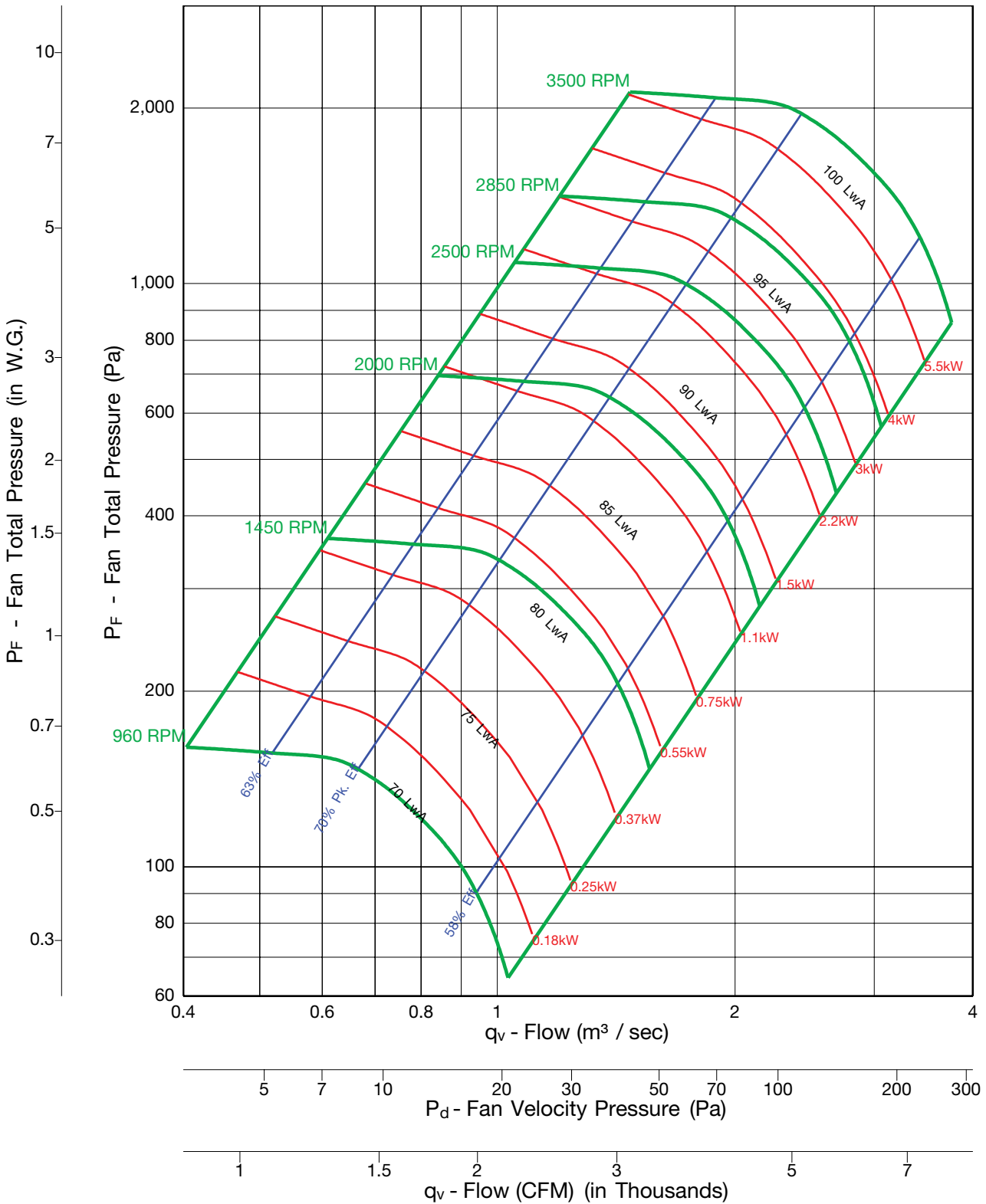
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 135



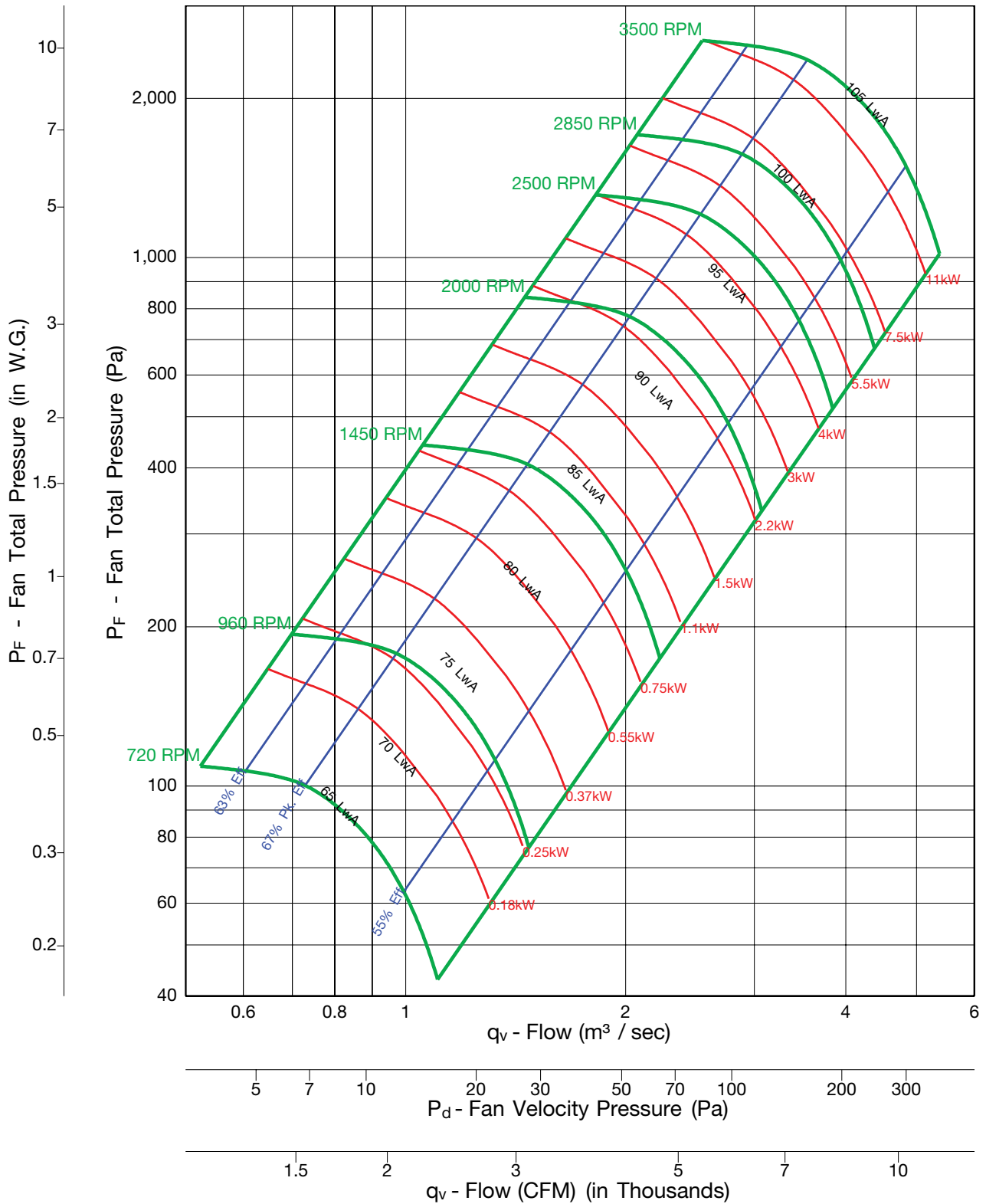
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 150



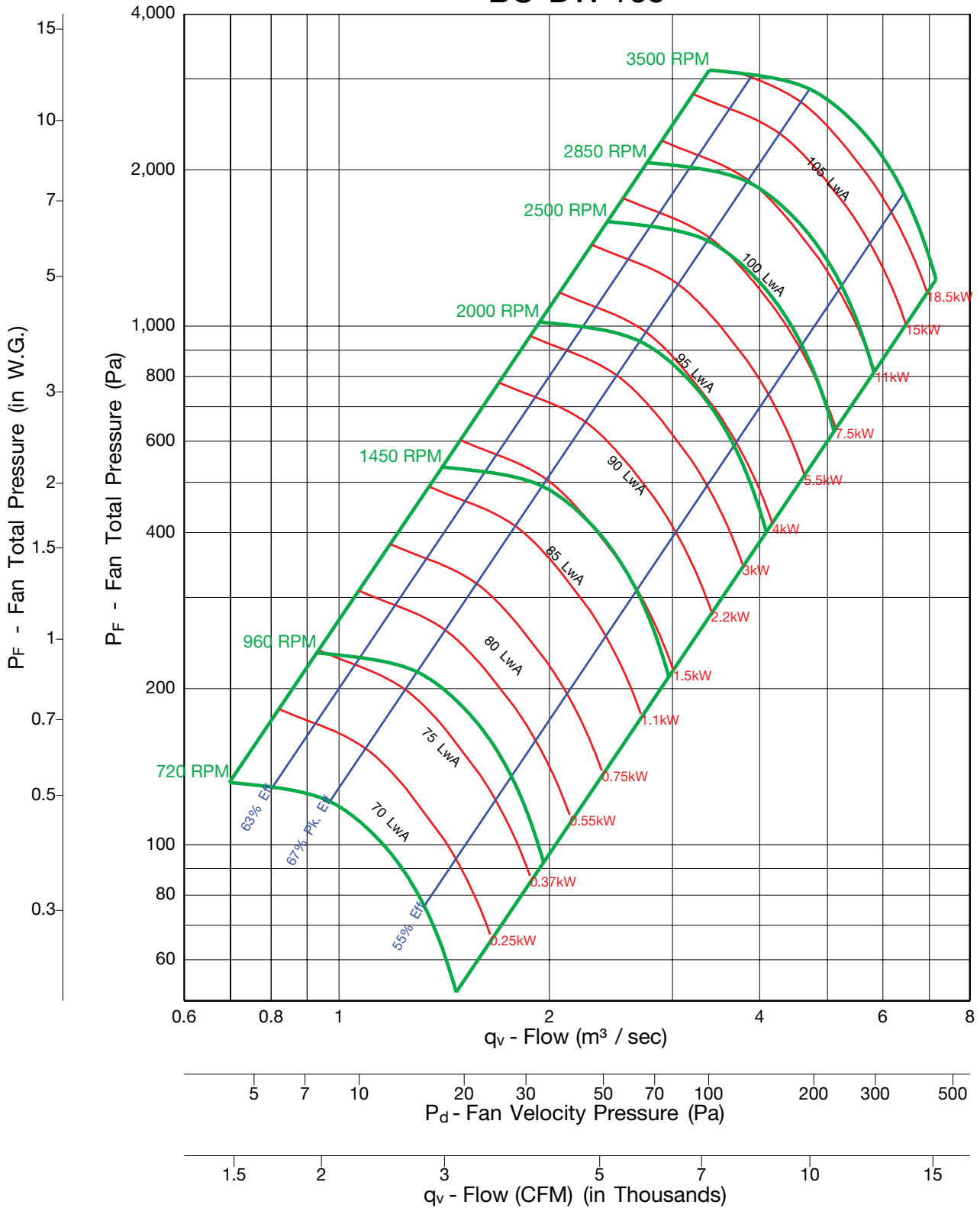
Fan Efficiency Grade = FEG 75



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 165

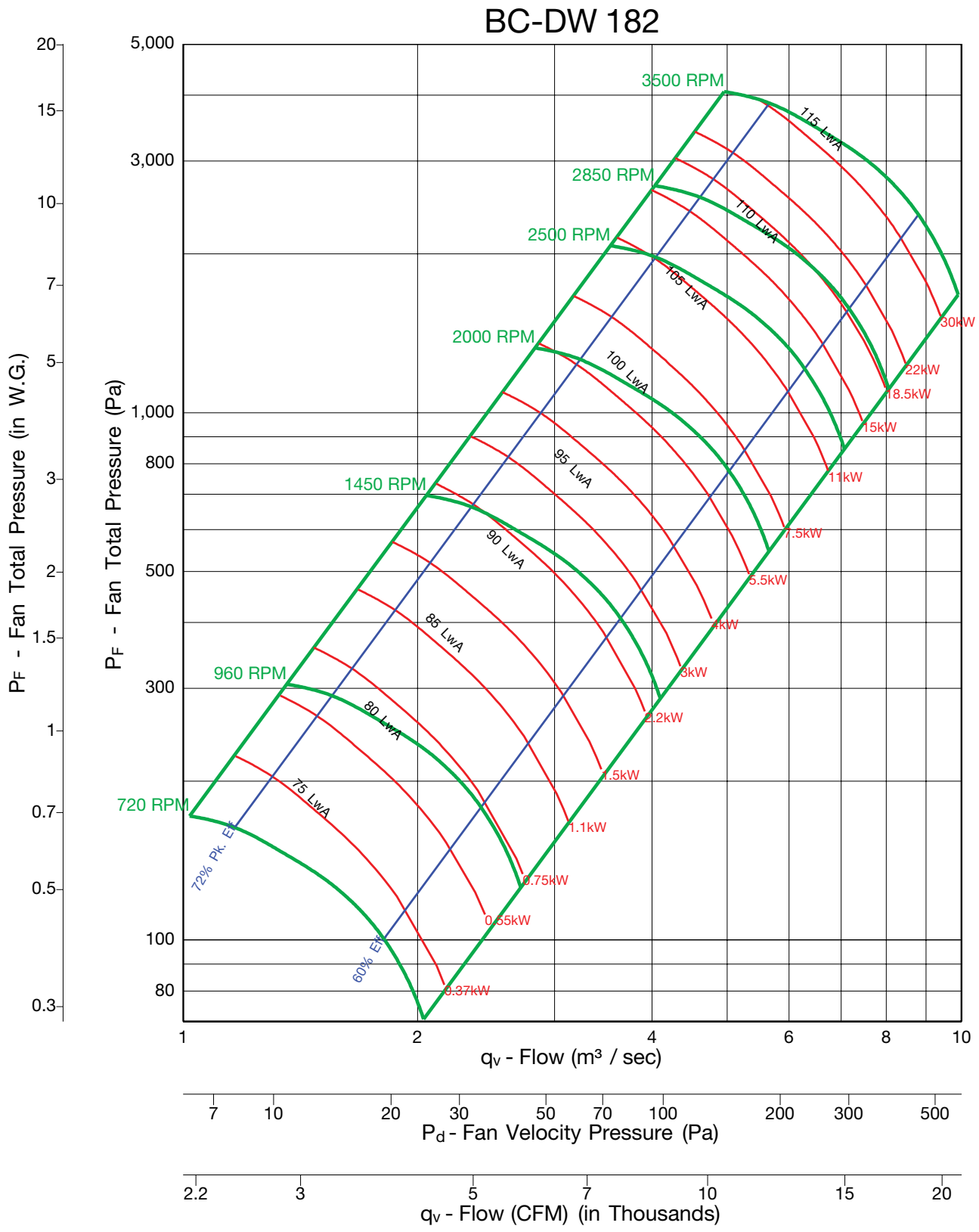


Fan Efficiency Grade = FEG 71



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwIA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



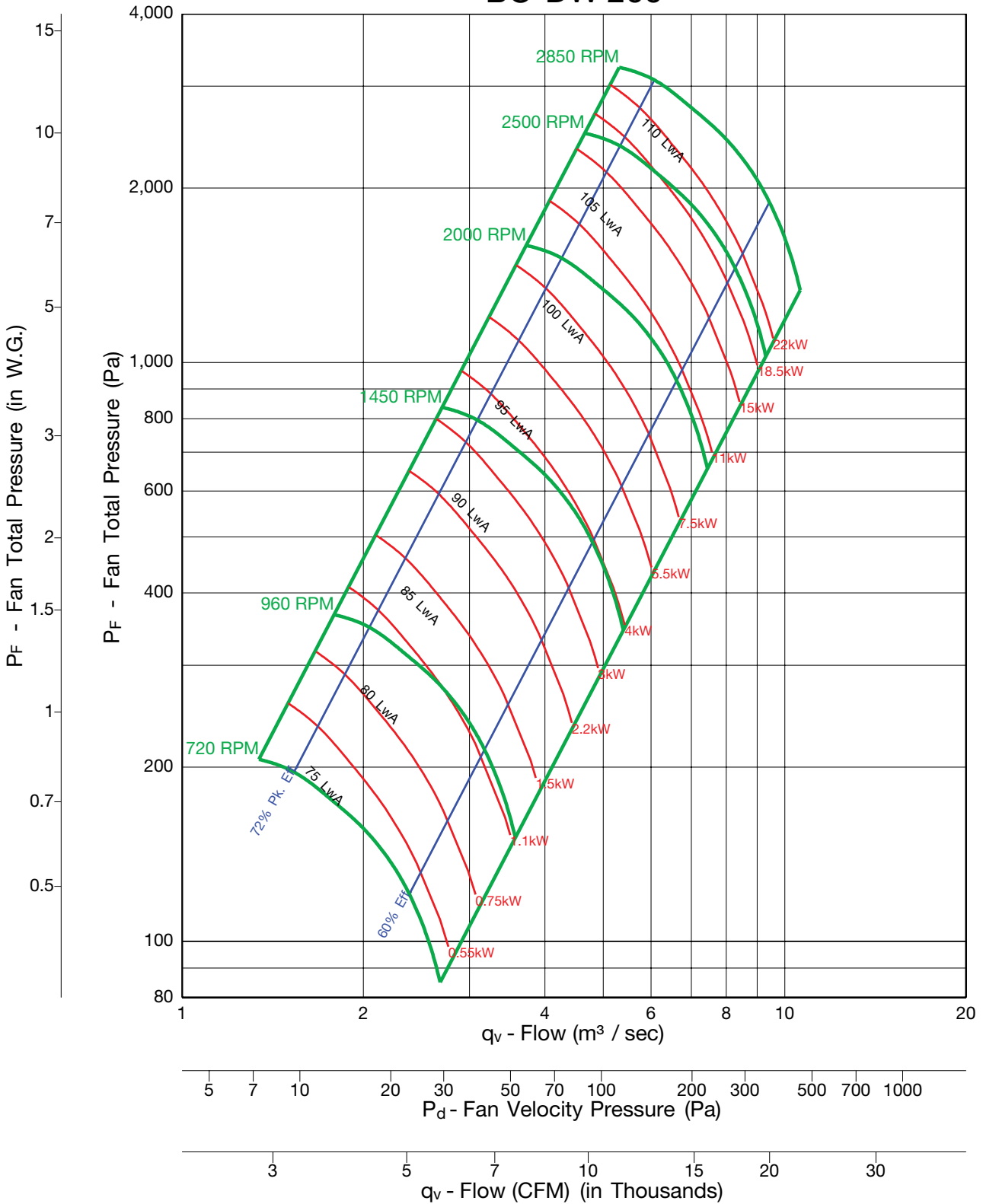
Fan Efficiency Grade = FEG 75



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 200

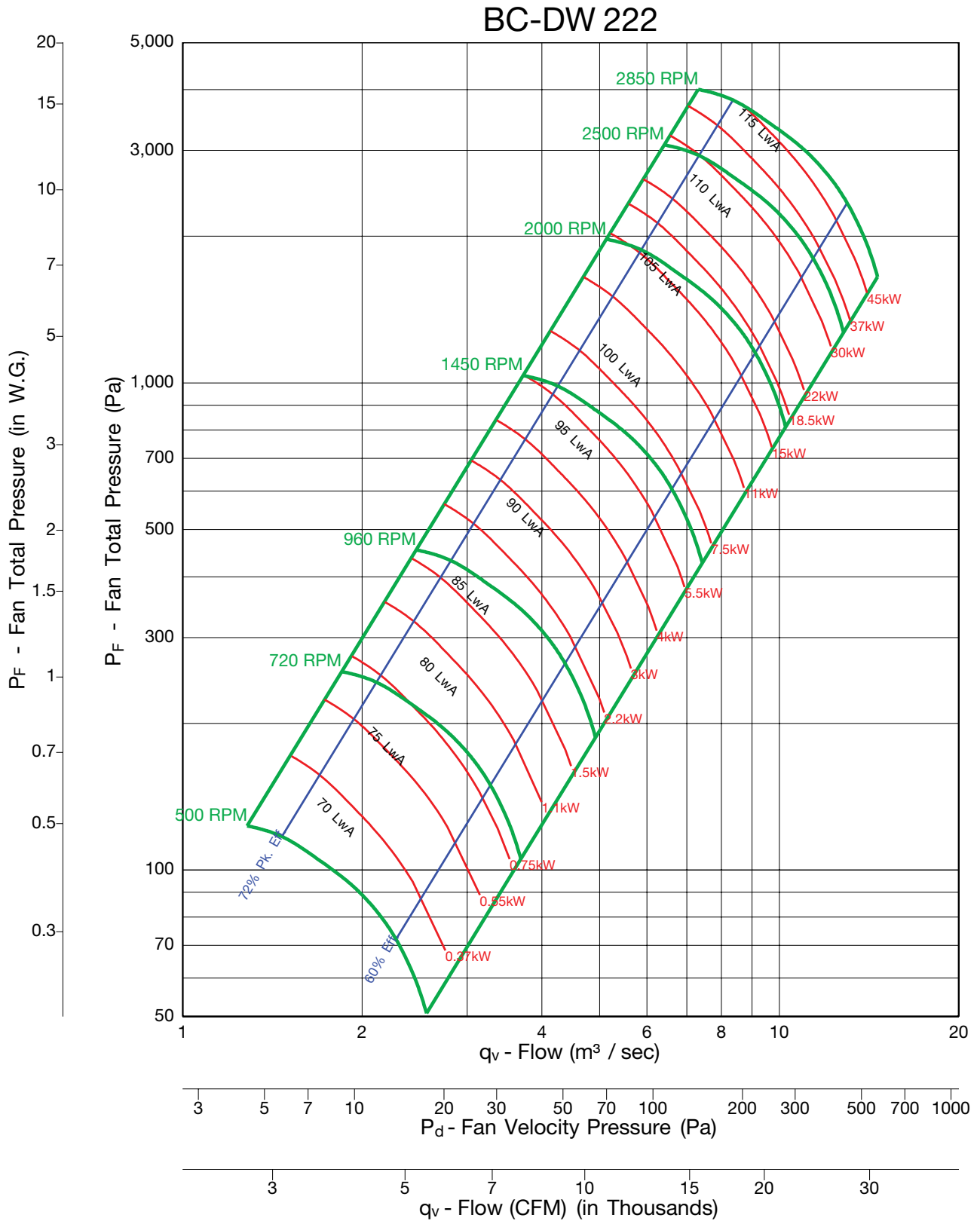


Fan Efficiency Grade = FEG 75



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



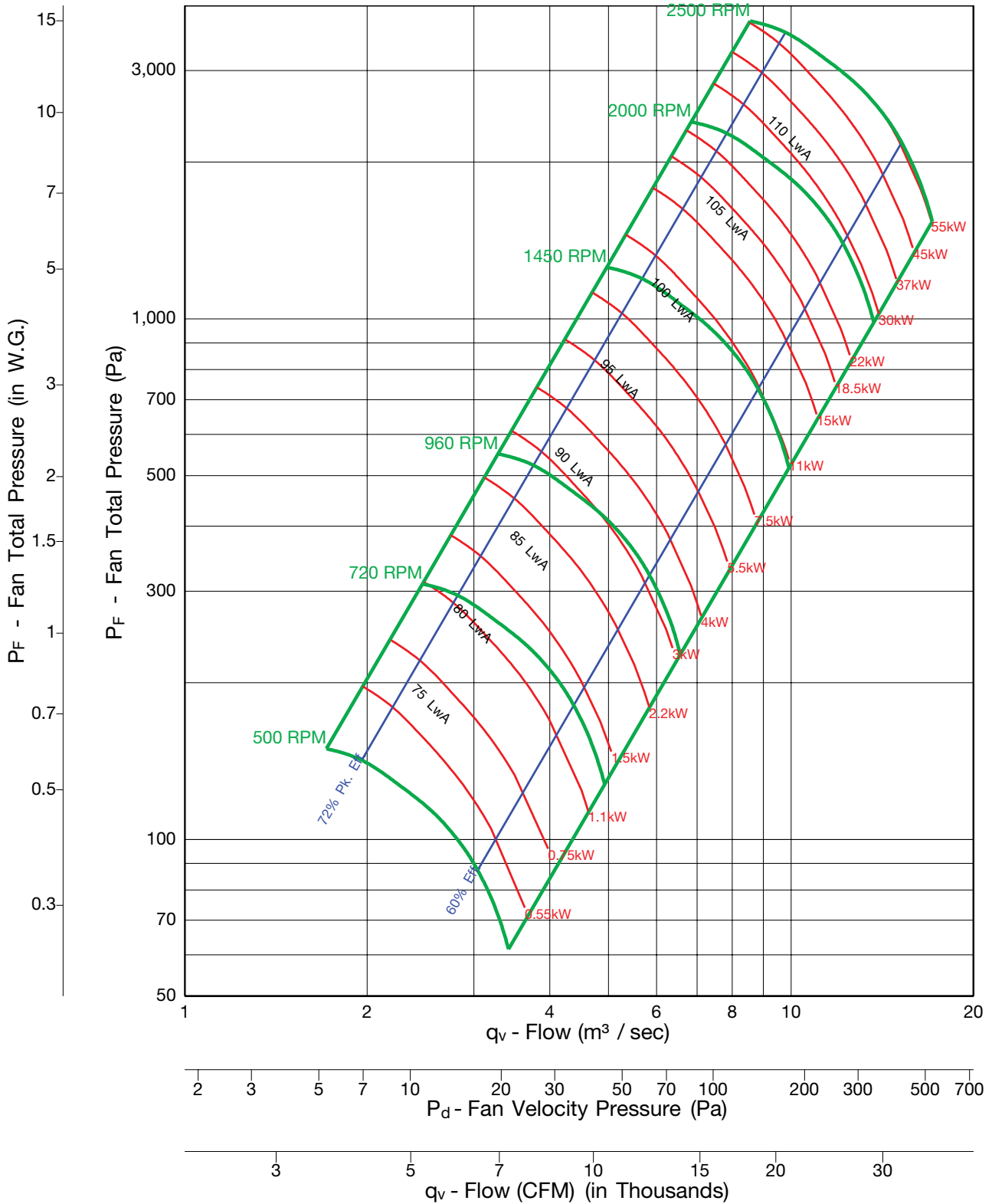
Fan Efficiency Grade = FEG 75



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 245

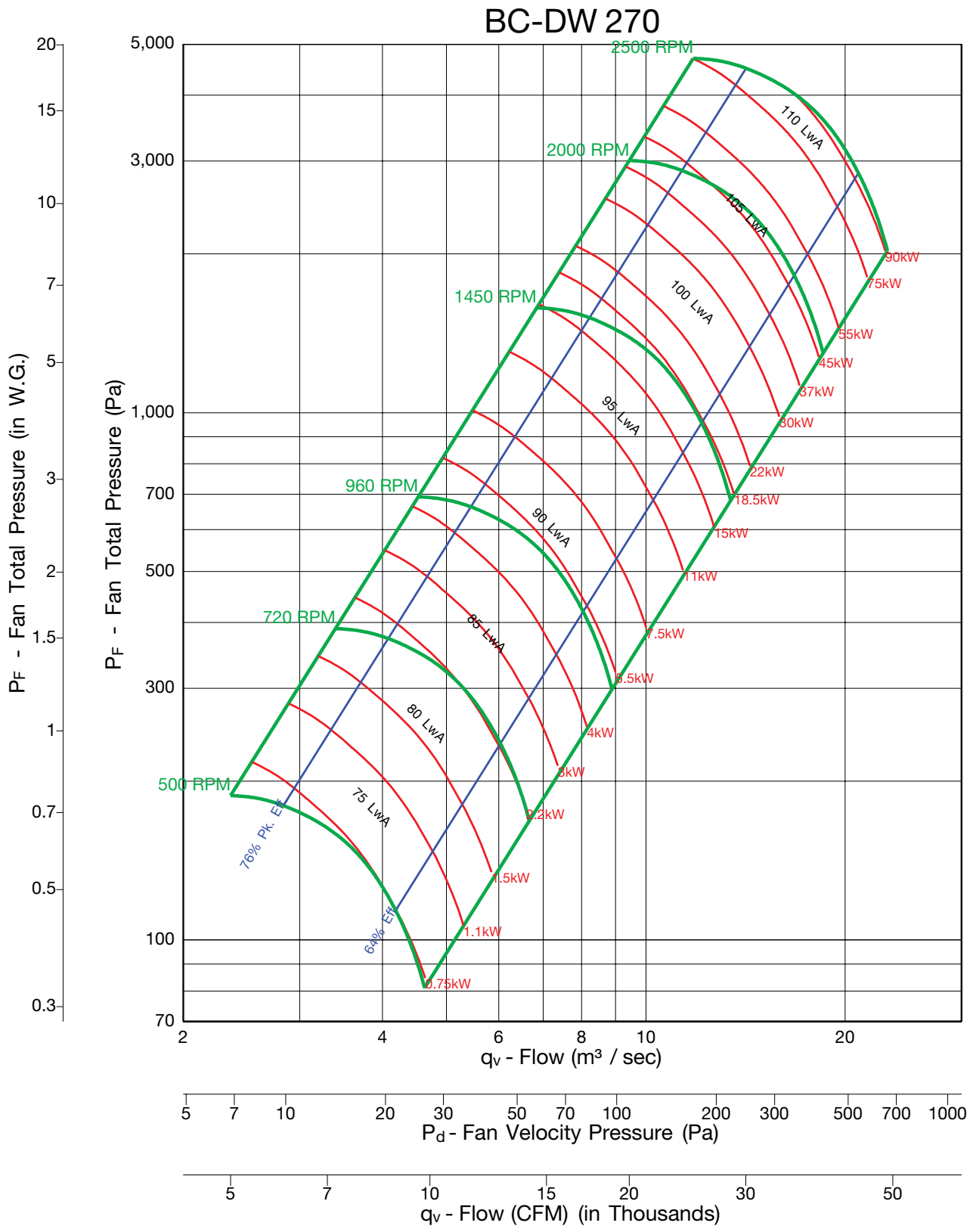


Fan Efficiency Grade = FEG 75



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



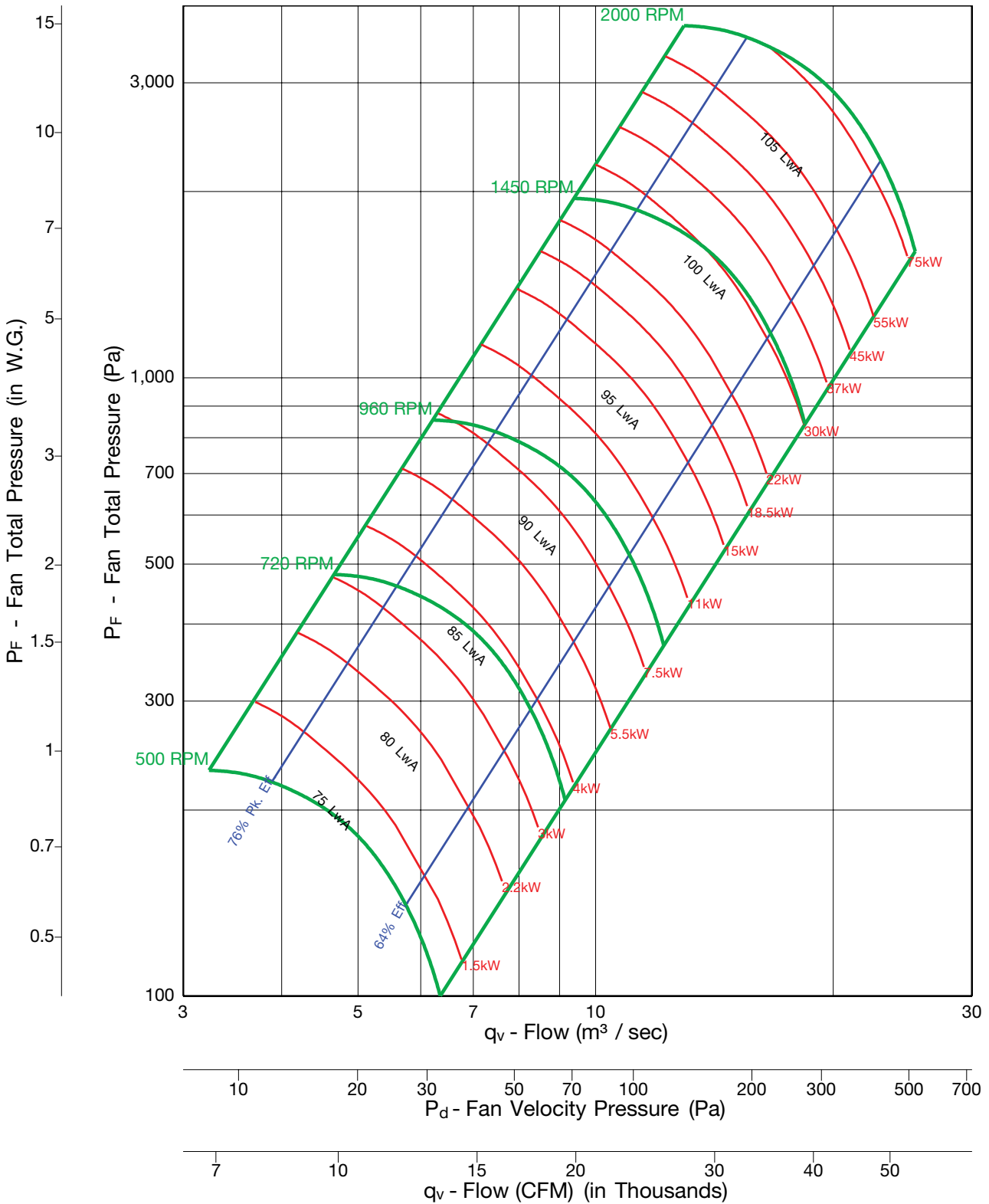
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 300

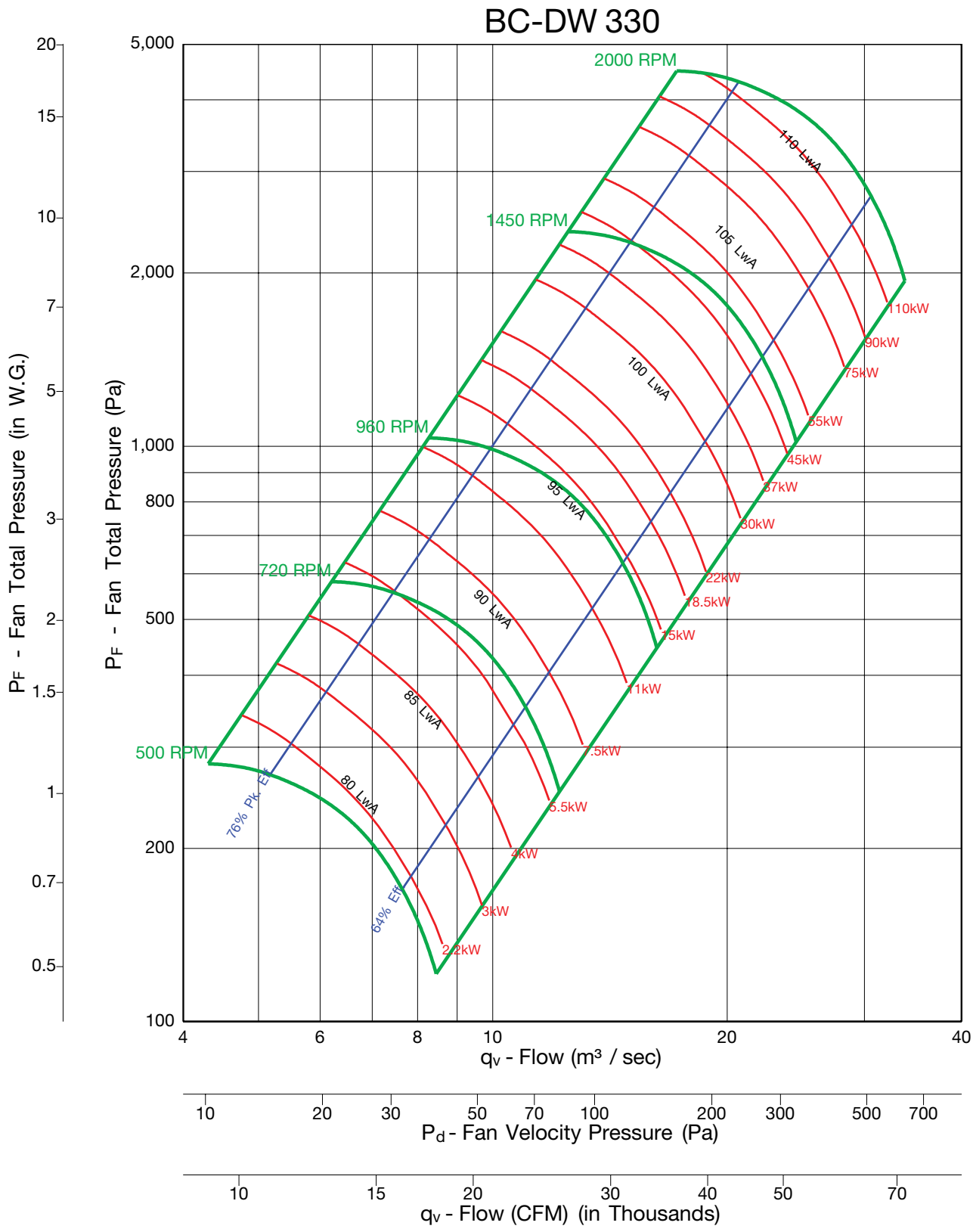


Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

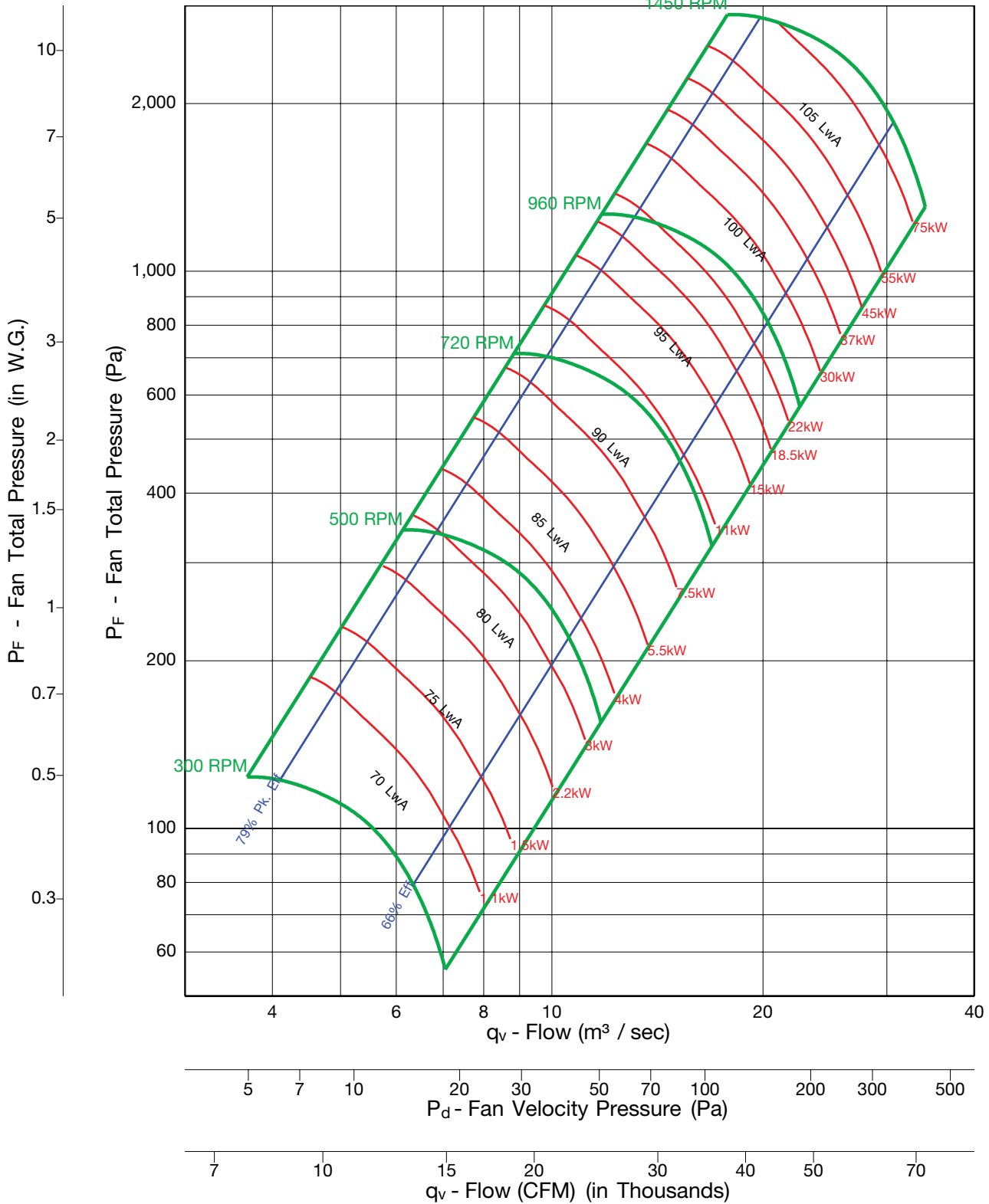


Fan Efficiency Grade = FEG 80



- Notes:**
1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
 2. Power rating (kW) does not include transmission losses.
 3. Performance ratings do not include the effects of appurtenances (accessories).
 4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
 5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
 6. Ratings do not include the effects of duct end correction.
 7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 365

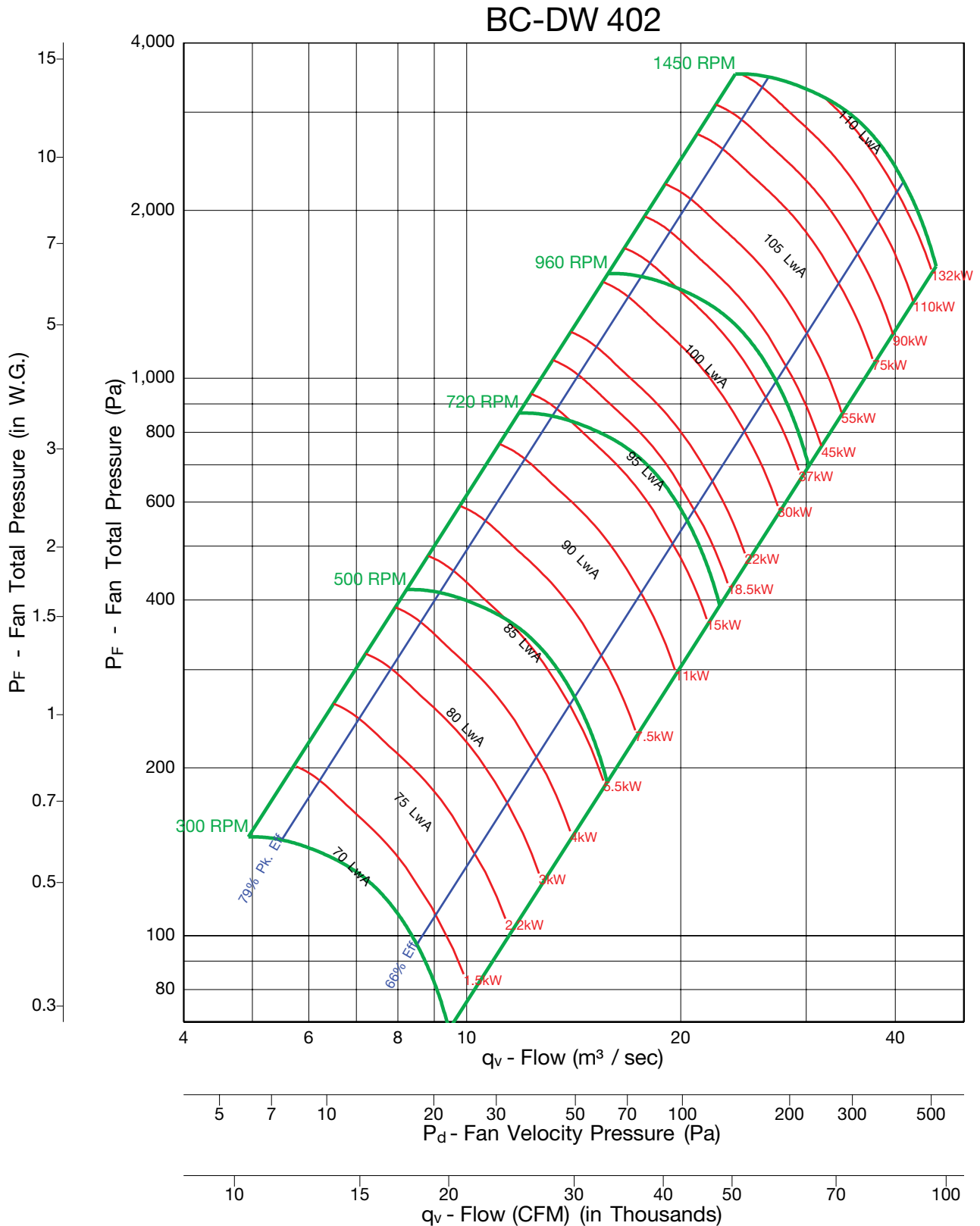


Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



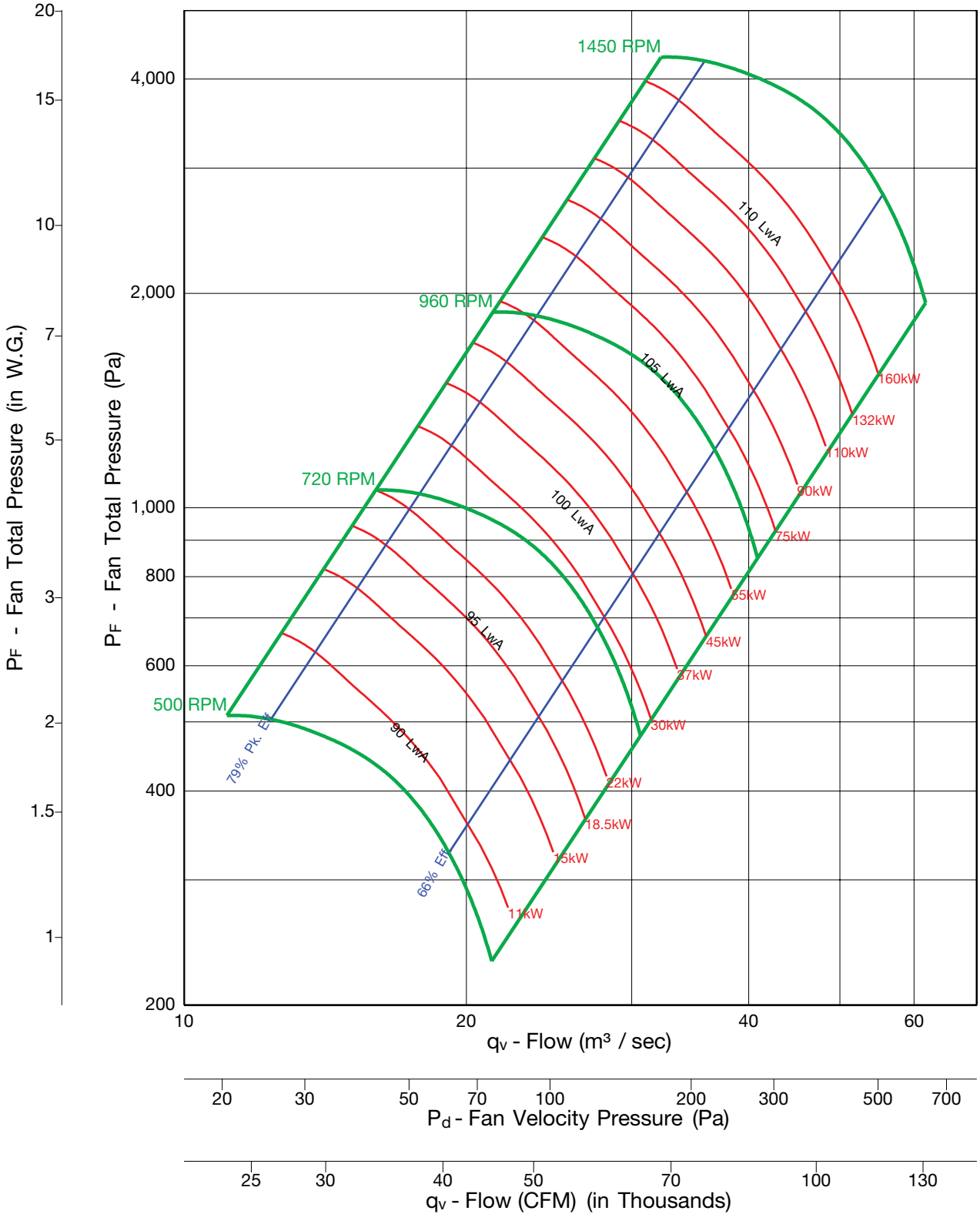
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 445



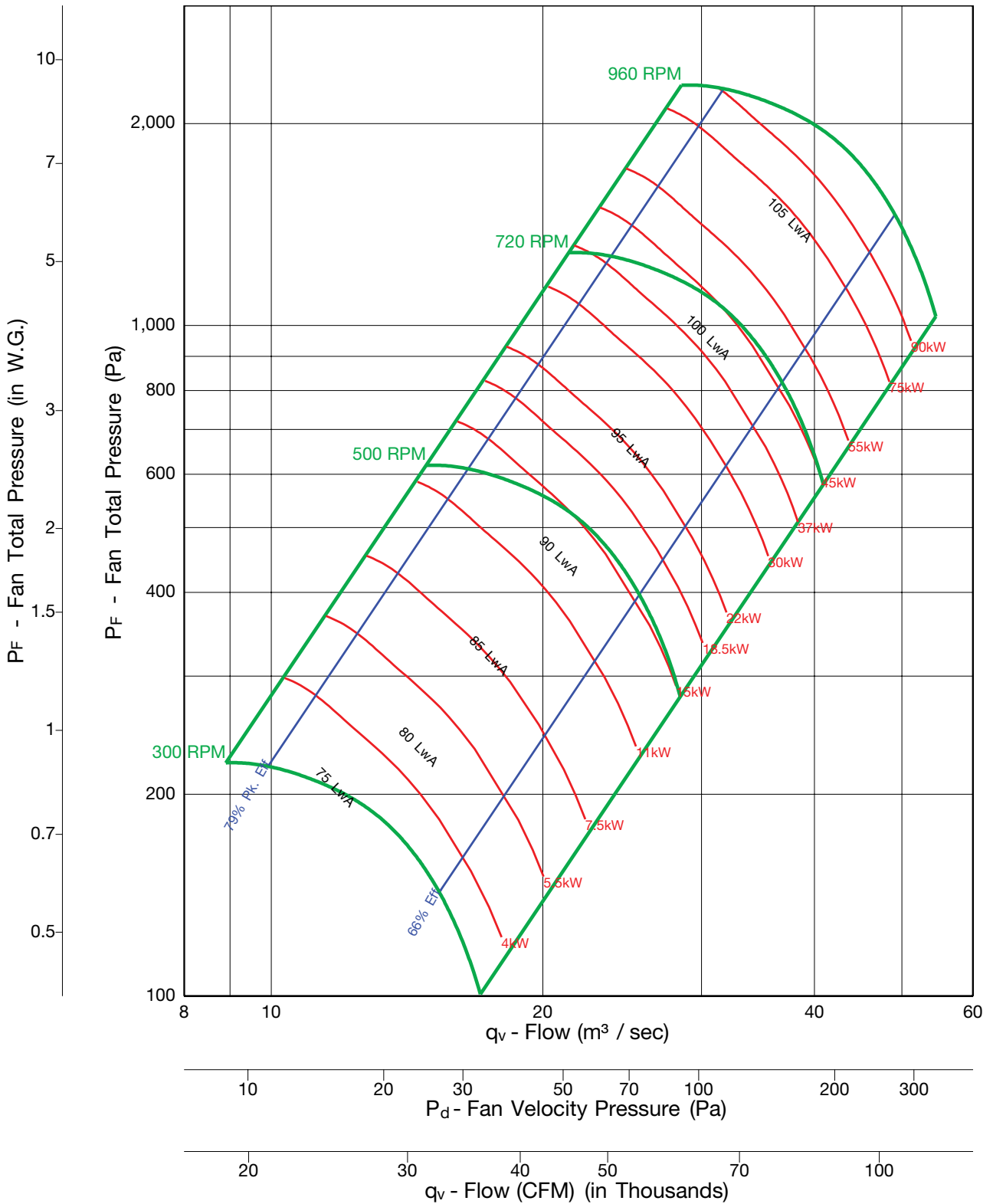
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 490



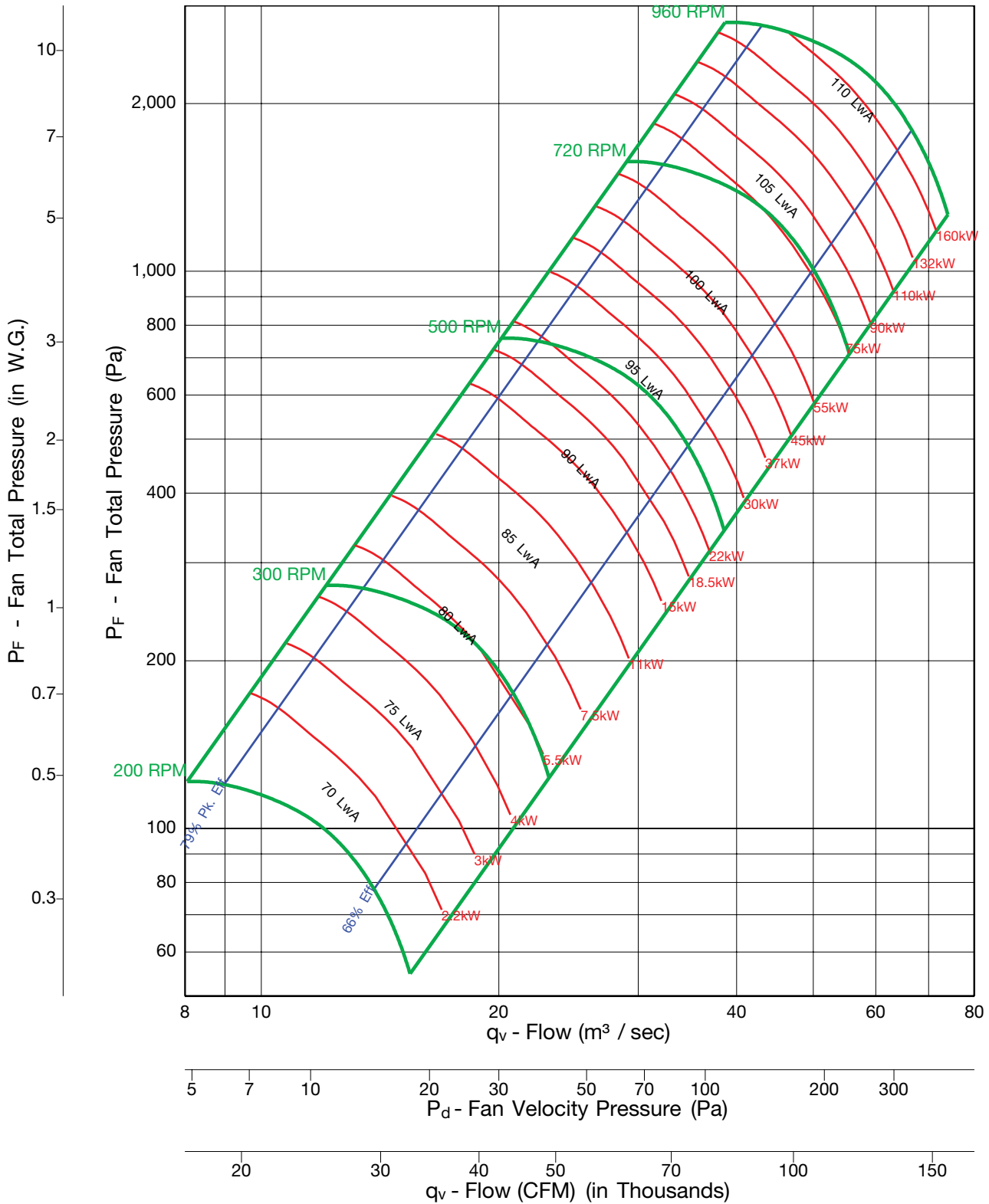
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 542

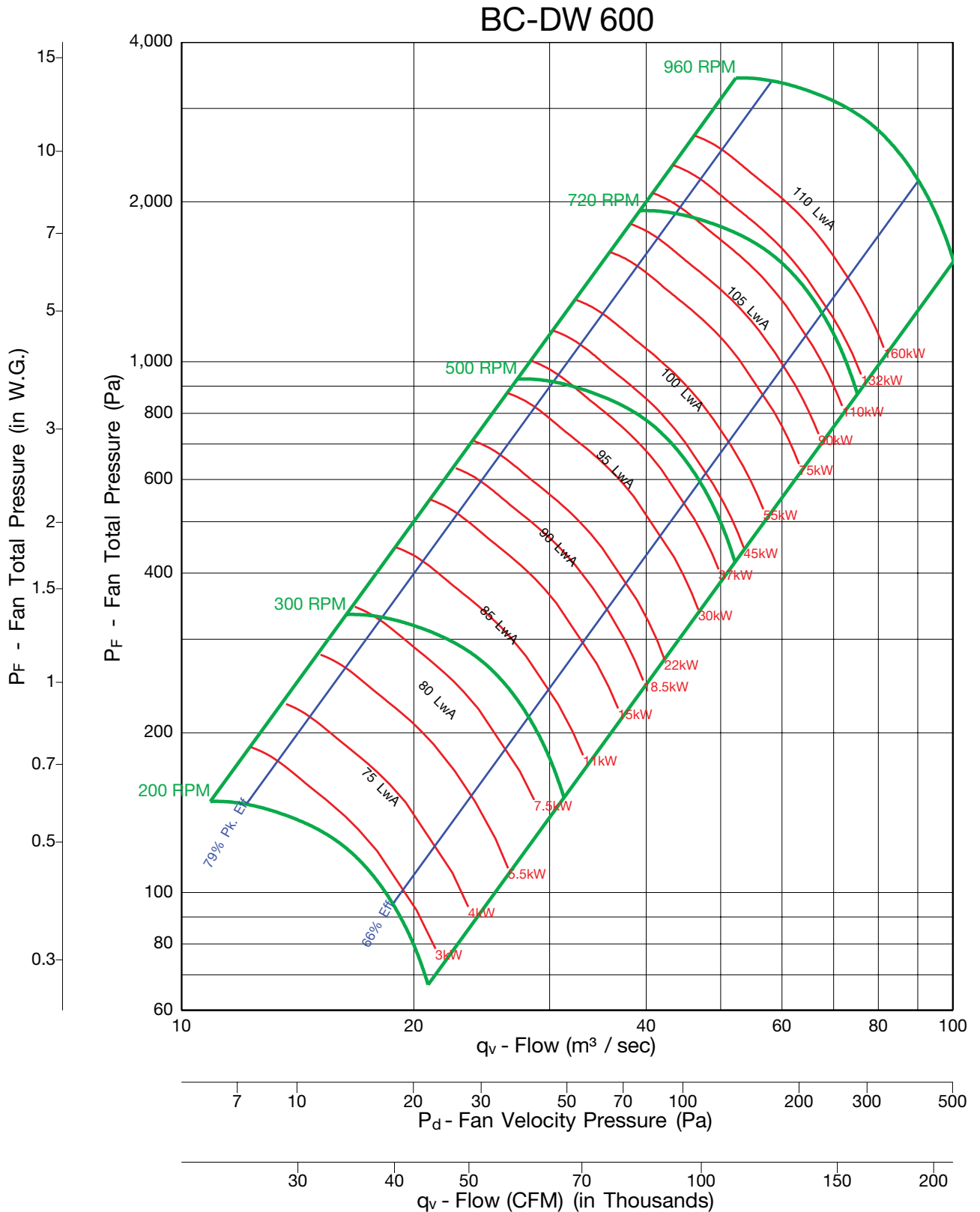


Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



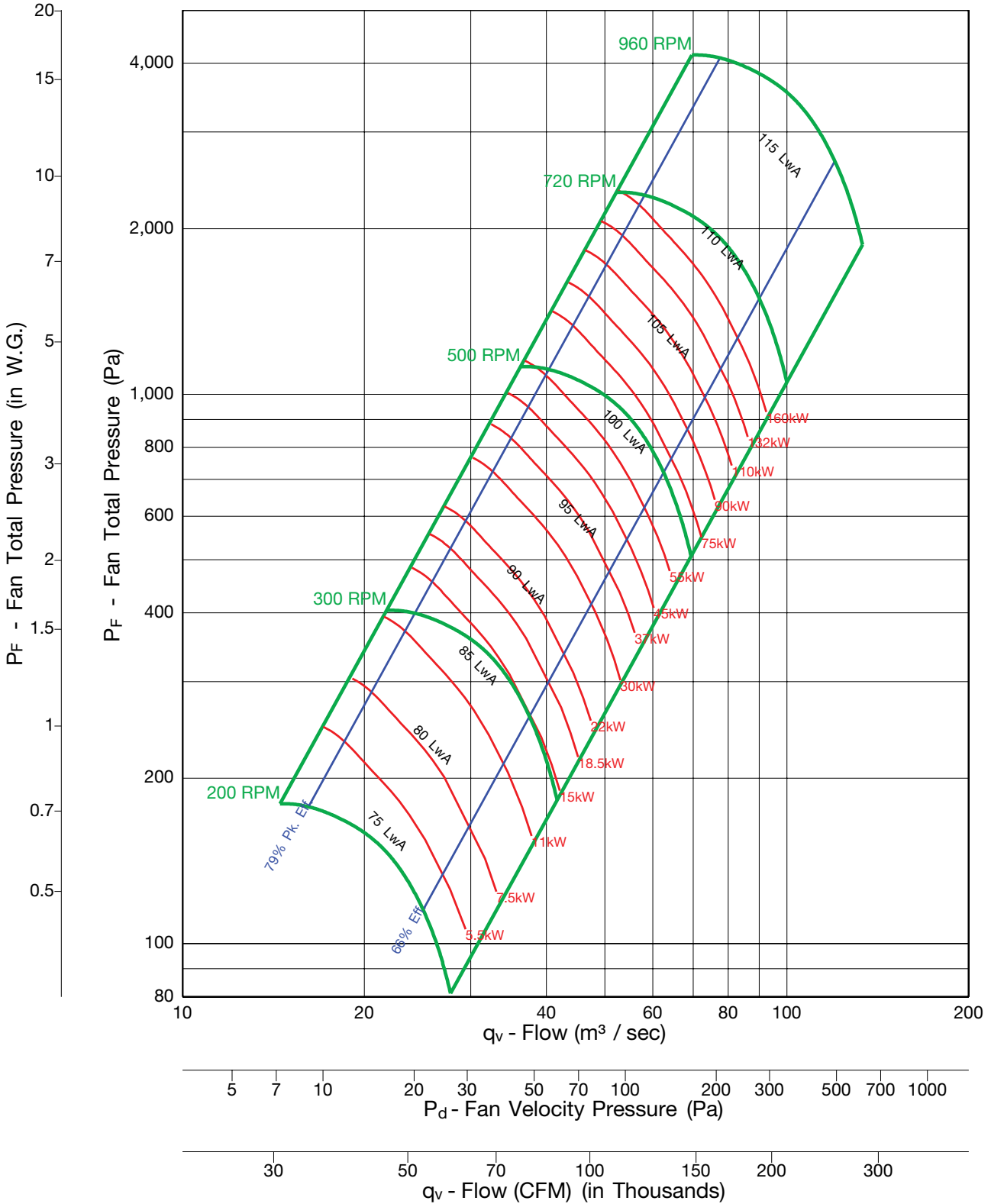
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 660

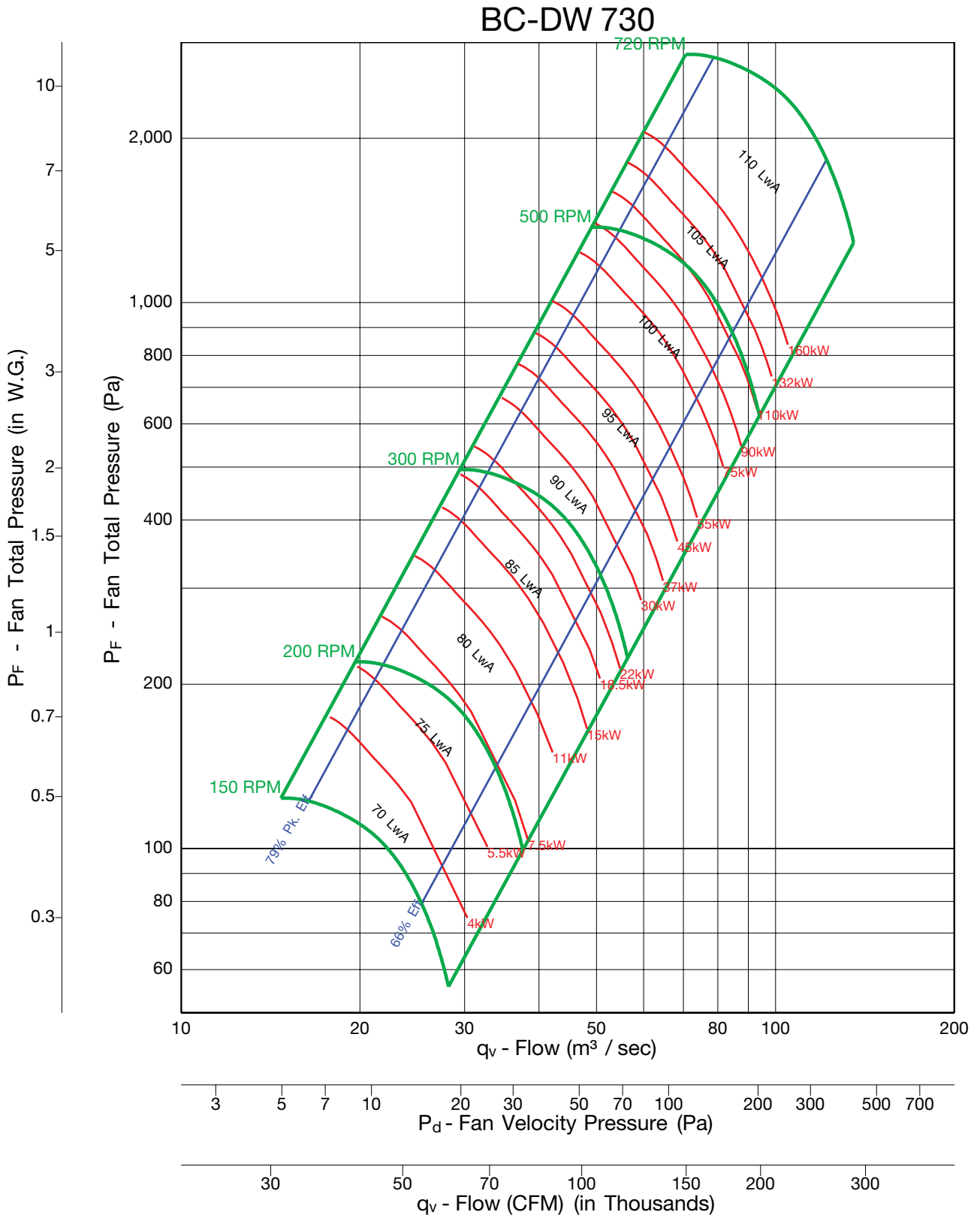


Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



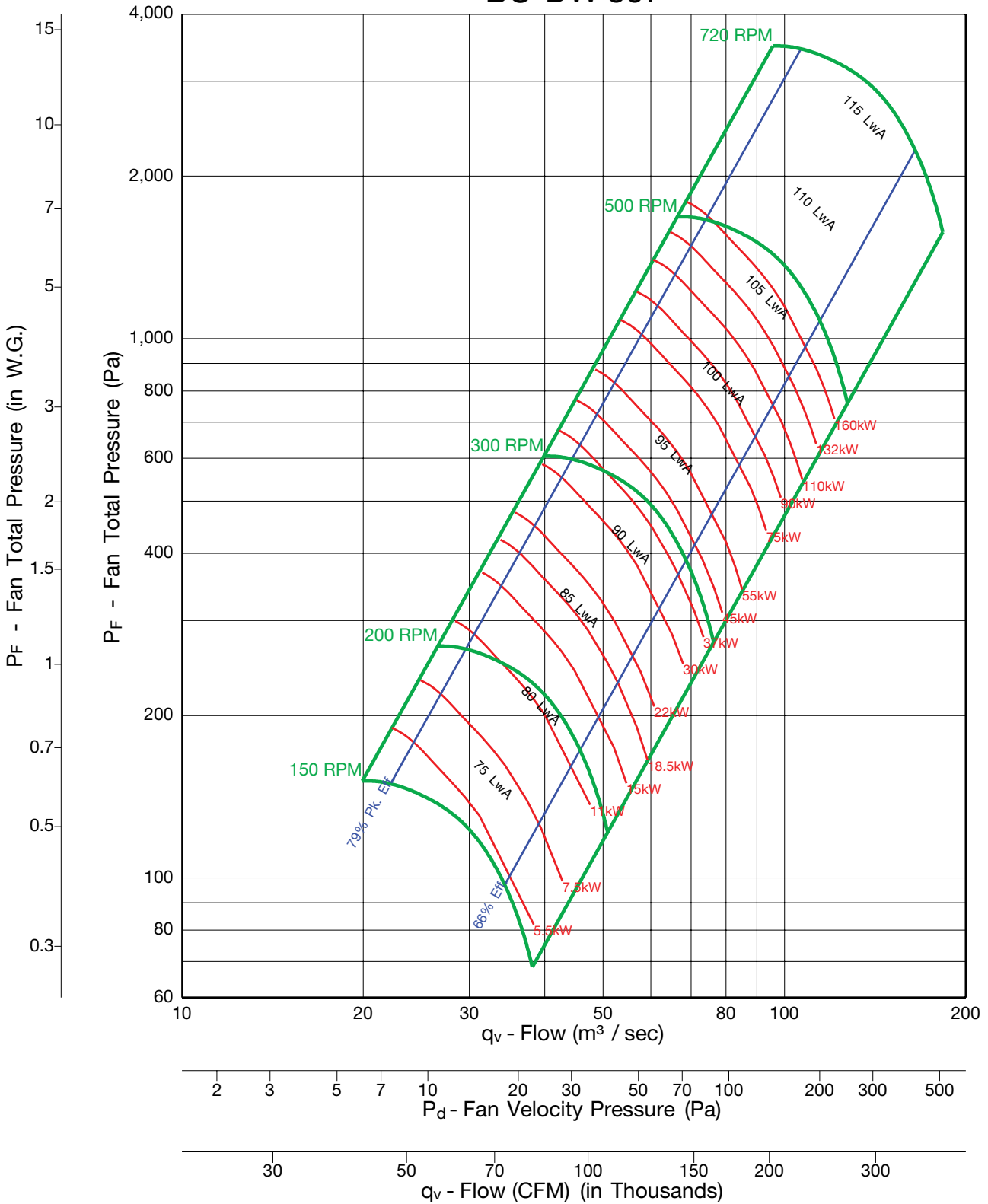
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 807

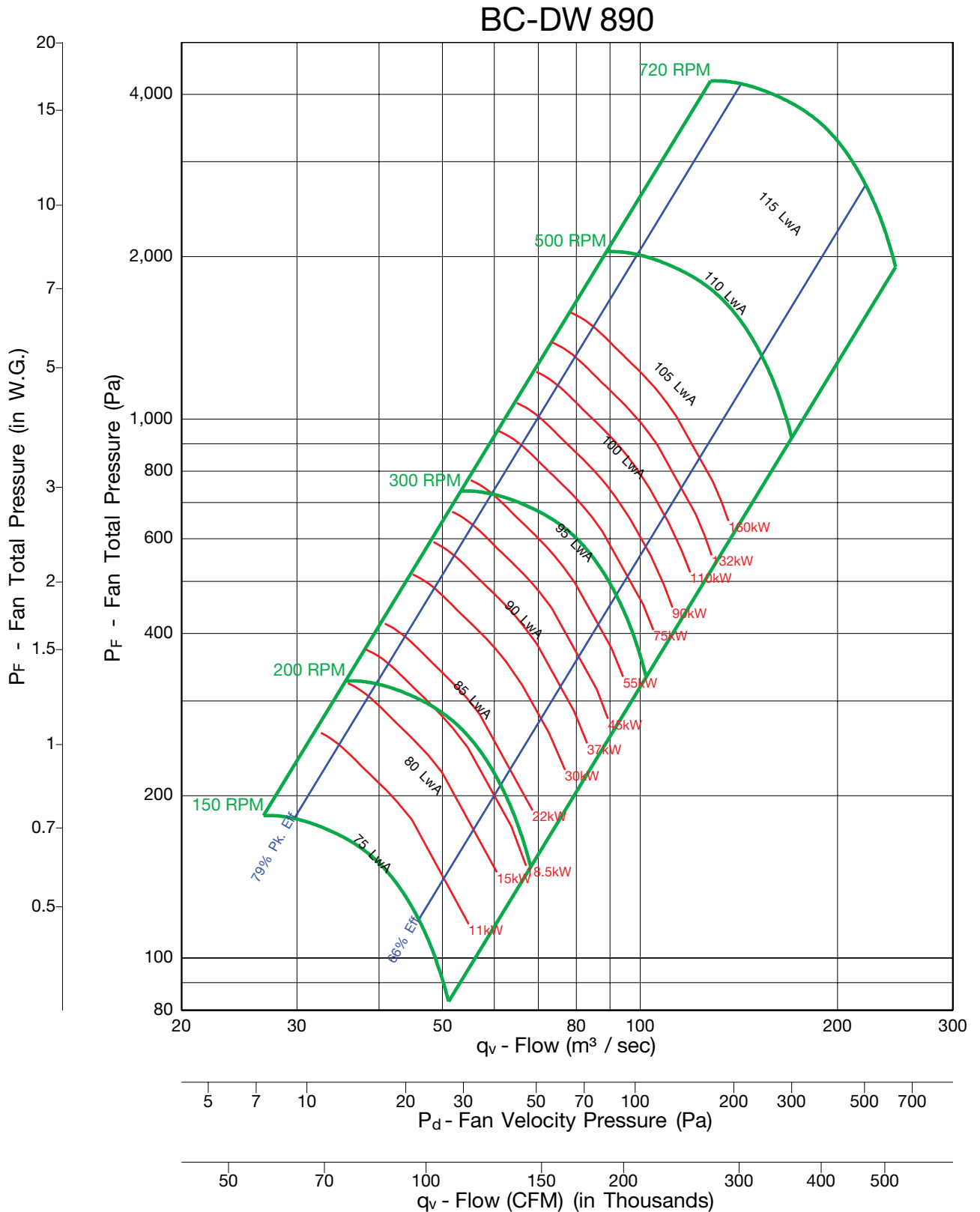


Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.



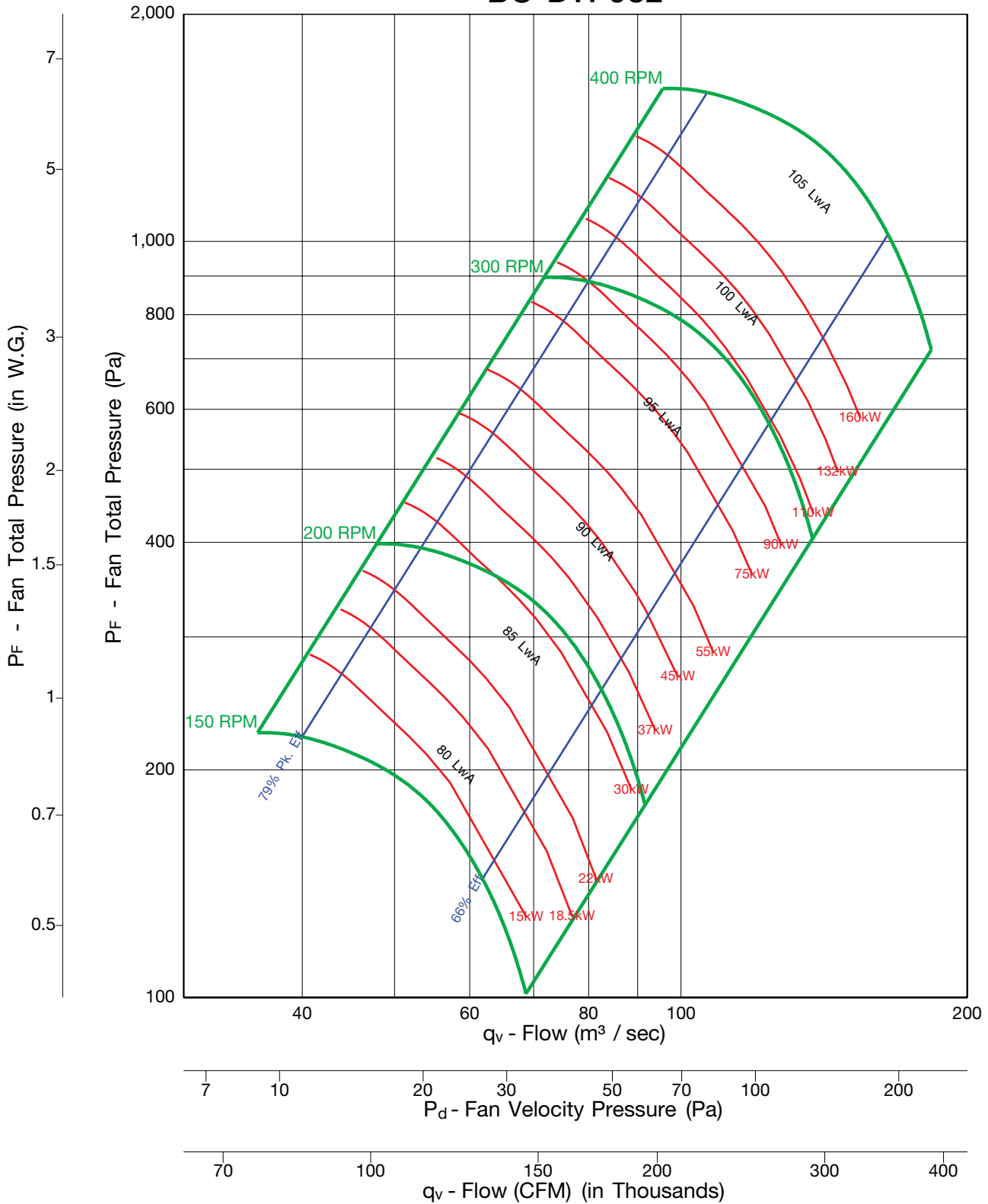
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

BC-DW 982



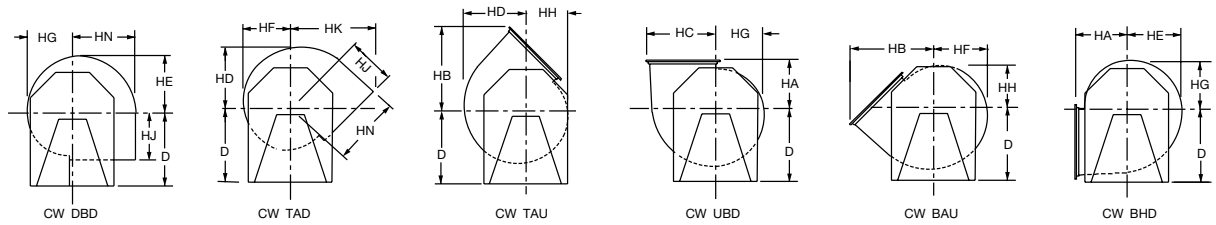
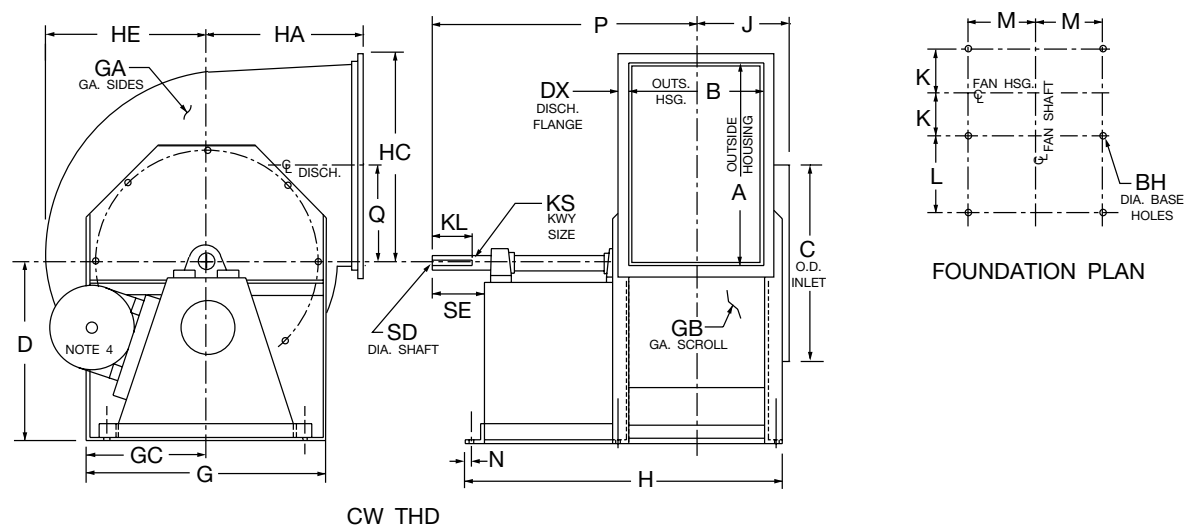
Fan Efficiency Grade = FEG 80



Notes:

1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
5. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, ducted outlet.
6. Ratings do not include the effects of duct end correction.
7. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Arrangement 9, SWSI Rotatable, Class I & II



NOTES:

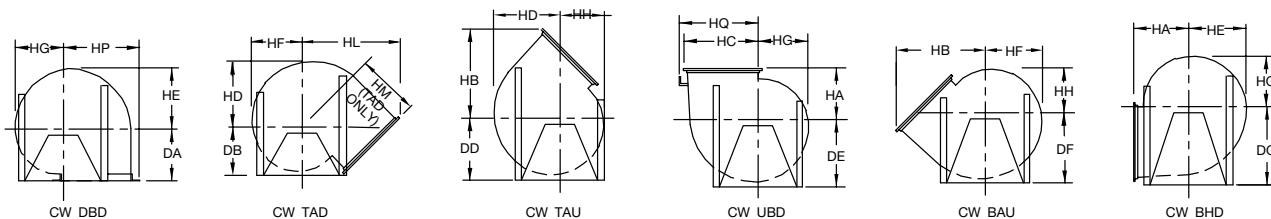
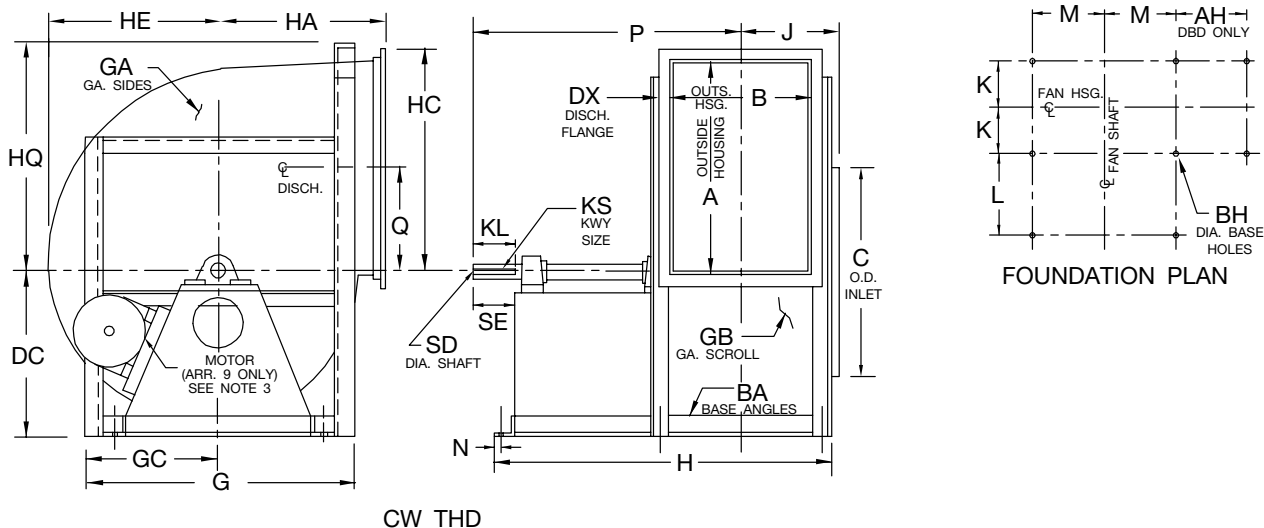
1. Discharge angles are included on all discharges except "TAD" and "DBD."
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
- *3. Shaft diameter is increased to 1.187 on Hi-Temp. fans which require shaft coolers.
4. Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.

| SIZE | A | B | BH | C | D | DX | FR | G | GA | GB | GC | H | HA | HB | HC | HD | HE | HF |
|------|-----|-----|----|-----|-----|----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|
| 122 | 330 | 248 | 11 | 337 | 368 | 25 | 90L | 406 | 2.0 | 2.0 | 203 | 686 | 248 | 425 | 354 | 284 | 268 | 252 |
| 135 | 363 | 275 | 11 | 370 | 400 | 25 | 112M | 445 | 2.0 | 2.0 | 222 | 778 | 273 | 467 | 387 | 313 | 295 | 278 |
| 150 | 403 | 303 | 11 | 411 | 451 | 25 | 112M | 483 | 2.0 | 2.0 | 241 | 806 | 303 | 516 | 427 | 349 | 327 | 308 |
| 165 | 443 | 335 | 11 | 451 | 483 | 25 | 132M | 521 | 2.0 | 2.0 | 260 | 918 | 334 | 565 | 467 | 383 | 359 | 338 |
| 182 | 492 | 370 | 11 | 495 | 533 | 32 | 160M | 572 | 2.5 | 2.0 | 286 | 1064 | 368 | 630 | 522 | 424 | 399 | 375 |
| 200 | 538 | 405 | 14 | 543 | 578 | 32 | 160M | 635 | 2.5 | 2.0 | 318 | 1099 | 402 | 686 | 568 | 467 | 440 | 413 |
| 222 | 598 | 449 | 14 | 603 | 648 | 32 | 160L | 692 | 2.5 | 2.0 | 346 | 1149 | 449 | 762 | 629 | 519 | 484 | 456 |
| 245 | 659 | 494 | 14 | 662 | 711 | 32 | 160L | 756 | 2.5 | 2.0 | 378 | 1194 | 495 | 838 | 689 | 568 | 533 | 502 |
| 270 | 727 | 543 | 14 | 724 | 775 | 38 | 180M | 838 | 2.5 | 2.0 | 419 | 1314 | 545 | 926 | 764 | 627 | 589 | 554 |

| SIZE | HG | HH | HJ | HK | HN | J | K | KL | KS | | L | M | N | P | Q | SD | | SE |
|------|-----|-----|-----|-----|-----|-----|-----|-----|---------|----------|-----|-----|----|------|-----|---------|----------|-----|
| | | | | | | | | | CLASS I | CLASS II | | | | | | CLASS I | CLASS II | |
| 122 | 236 | 221 | 235 | 399 | 329 | 189 | 146 | 64 | 8 x 7 | 8 x 7 | 368 | 171 | 13 | 572 | 164 | 25 | 25* | 83 |
| 135 | 260 | 243 | 260 | 440 | 362 | 203 | 160 | 64 | 8 x 7 | 8 x 7 | 432 | 187 | 13 | 649 | 181 | 25 | 25* | 83 |
| 150 | 289 | 270 | 291 | 489 | 402 | 230 | 175 | 76 | 8 x 7 | 8 x 7 | 432 | 210 | 13 | 676 | 200 | 25 | 30 | 95 |
| 165 | 318 | 297 | 321 | 538 | 441 | 246 | 191 | 76 | 8 x 7 | 8 x 7 | 505 | 222 | 16 | 756 | 221 | 25* | 30 | 95 |
| 182 | 351 | 327 | 356 | 598 | 490 | 276 | 208 | 89 | 8 x 7 | 10 x 8 | 616 | 245 | 16 | 897 | 245 | 30 | 38 | 108 |
| 200 | 404 | 359 | 389 | 654 | 537 | 294 | 226 | 89 | 10 x 8 | 10 x 8 | 616 | 270 | 16 | 914 | 268 | 38 | 38 | 108 |
| 222 | 427 | 399 | 437 | 730 | 597 | 316 | 254 | 102 | 10 x 8 | 10 x 8 | 597 | 298 | 22 | 943 | 298 | 38 | 38 | 121 |
| 245 | 470 | 438 | 483 | 806 | 657 | 338 | 276 | 114 | 10 x 8 | 14 x 9 | 597 | 327 | 22 | 978 | 329 | 38 | 45 | 133 |
| 270 | 519 | 484 | 532 | 889 | 725 | 362 | 300 | 114 | 14 x 9 | 14 x 9 | 670 | 359 | 22 | 1075 | 362 | 45 | 45 | 133 |

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1 & 9, SWSI Non-Rotatable, Class I & II



NOTES:

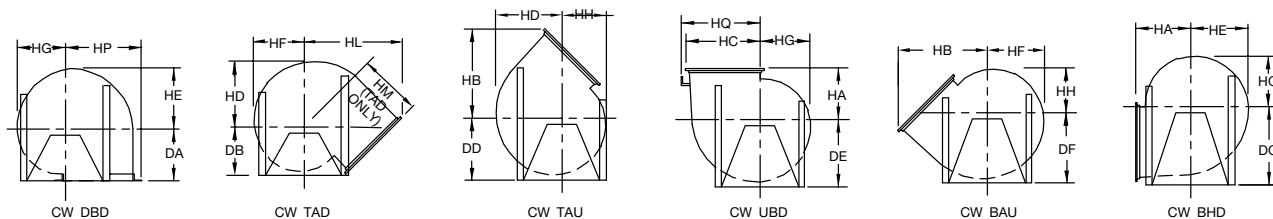
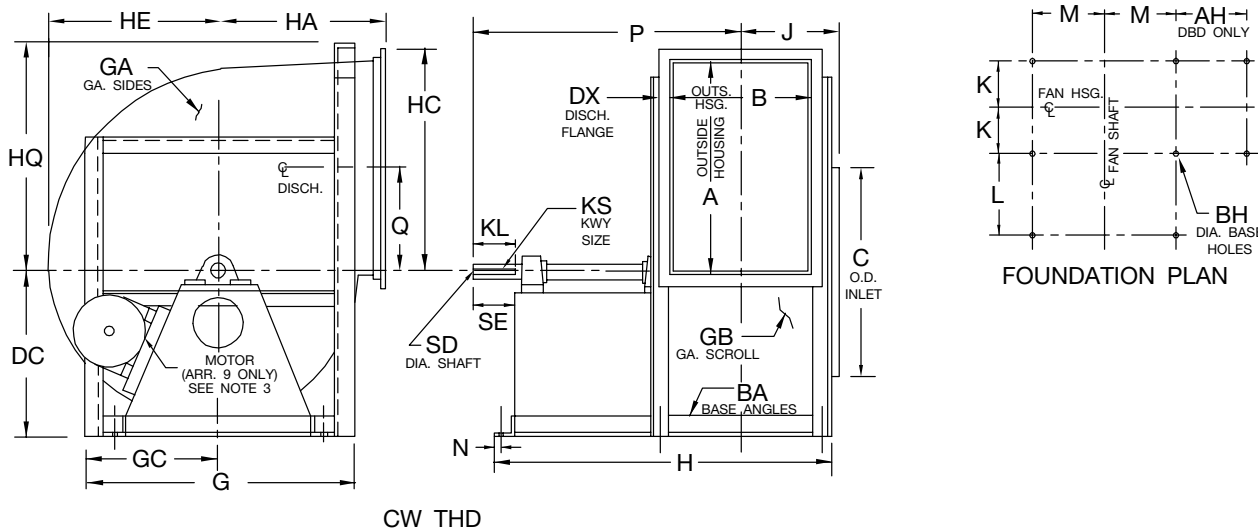
1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
4. For fans with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

| SIZE | A | AH | B | BA | BH | C | DA | DB | DC | DD | DE | DF | DG | DX | FR ARR. 9 | G | GA | GB |
|------|------|------|------|----------|----|------|------|------|------|------|------|------|------|----|--------------|------|-----|-----|
| 300 | 808 | 438 | 605 | 65 x 65 | 14 | 803 | 679 | 679 | 679 | 679 | 724 | 762 | 902 | 38 | 180L | 1041 | 3.0 | 2.5 |
| 330 | 892 | 484 | 662 | 65 x 65 | 14 | 883 | 762 | 762 | 762 | 762 | 787 | 832 | 991 | 38 | 200M | 1118 | 3.0 | 2.5 |
| 365 | 983 | 537 | 734 | 65 x 65 | 14 | 978 | 737 | 775 | 749 | 800 | 851 | 902 | 1041 | 38 | 200M | 1219 | 3.0 | 2.5 |
| 402 | 1083 | 592 | 808 | 75 x 75 | 21 | 1078 | 813 | 826 | 838 | 895 | 940 | 1003 | 1156 | 38 | 200L | 1334 | 3.0 | 2.5 |
| 445 | 1197 | 656 | 894 | 75 x 75 | 21 | 1191 | 899 | 921 | 902 | 978 | 1016 | 1099 | 1270 | 38 | 225S | 1435 | 3.0 | 2.5 |
| 490 | 1319 | 715 | 981 | 75 x 75 | 21 | 1311 | 991 | 984 | 991 | 1073 | 1118 | 1207 | 1391 | 51 | 225S | 1562 | 3.0 | 2.5 |
| 542 | 1457 | 808 | 1089 | 75 x 100 | 21 | 1451 | 1094 | 1073 | 1105 | 1181 | 1245 | 1327 | 1530 | 51 | 250S | 1702 | 3.0 | 2.5 |
| 600 | 1613 | 887 | 1202 | 75 x 100 | 21 | 1604 | 1211 | 1143 | 1219 | 1302 | 1372 | 1461 | 1683 | 51 | 250S | 1854 | 3.0 | 2.5 |
| 660 | 1770 | 994 | 1326 | 90 x 125 | 21 | 1762 | 1332 | 1257 | 1334 | 1416 | 1499 | 1600 | 1861 | 64 | 250M | 2032 | 3.0 | 2.5 |
| 730 | 1962 | 1083 | 1462 | 90 x 125 | 21 | 1949 | 1473 | 1378 | 1448 | 1568 | 1638 | 1765 | 2051 | 64 | 250M | 2235 | 3.0 | 3.0 |

| SIZE | GC | H | HA | HB | HC | HD | HE | HF | HG | HH | HL | HM | HP | HQ | J | K | KL | KS | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|---------|---------|
| | | | | | | | | | | | | | | | | | | CL I | CL II |
| 300 | 521 | 1416 | 605 | 1024 | 845 | 697 | 654 | 616 | 578 | 540 | 1197 | 849 | 870 | — | 394 | 338 | 127 | 14 x 9 | 14 x 9 |
| 330 | 559 | 1540 | 667 | 1129 | 929 | 765 | 721 | 678 | 635 | 592 | 1295 | 903 | 954 | — | 422 | 367 | 127 | 14 x 9 | 16 x 10 |
| 365 | 610 | 1610 | 737 | 1242 | 1019 | 851 | 800 | 753 | 705 | 657 | 1410 | 975 | 1045 | — | 457 | 402 | 127 | 14 x 9 | 18 x 11 |
| 402 | 667 | 1724 | 813 | 1367 | 1119 | 940 | 881 | 829 | 776 | 724 | 1537 | 1056 | 1157 | — | 508 | 446 | 127 | 16 x 10 | 18 x 11 |
| 445 | 718 | 1851 | 899 | 1508 | 1233 | 1038 | 972 | 914 | 857 | 800 | 1669 | 1127 | 1272 | — | 551 | 489 | 140 | 18 x 11 | 20 x 12 |
| 490 | 781 | 1946 | 991 | 1669 | 1369 | 1140 | 1072 | 1008 | 945 | 881 | 1837 | 1230 | 1394 | — | 594 | 532 | 140 | 20 x 12 | 20 x 12 |
| 542 | 851 | 2223 | 1094 | 1838 | 1506 | 1264 | 1186 | 1116 | 1046 | 976 | 2004 | 1329 | 1557 | 1518 | 673 | 598 | 152 | 20 x 12 | 25 x 14 |
| 600 | 927 | 2330 | 1211 | 2032 | 1662 | 1397 | 1313 | 1235 | 1157 | 1080 | 2191 | 1437 | 1713 | 1670 | 730 | 656 | 152 | 20 x 12 | 25 x 14 |
| 660 | 1016 | 2572 | 1332 | 2237 | 1832 | 1534 | 1443 | 1356 | 1268 | 1181 | 2408 | 1575 | 1896 | 1835 | 818 | 730 | 178 | 25 x 14 | 28 x 16 |
| 730 | 1118 | 2785 | 1473 | 2472 | 2023 | 1700 | 1597 | 1502 | 1407 | 1311 | 2646 | 1719 | 2086 | 2026 | 887 | 799 | 191 | 25 x 14 | 28 x 16 |

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1 & 9, Non-Rotatable, Class I & II (cont'd.)



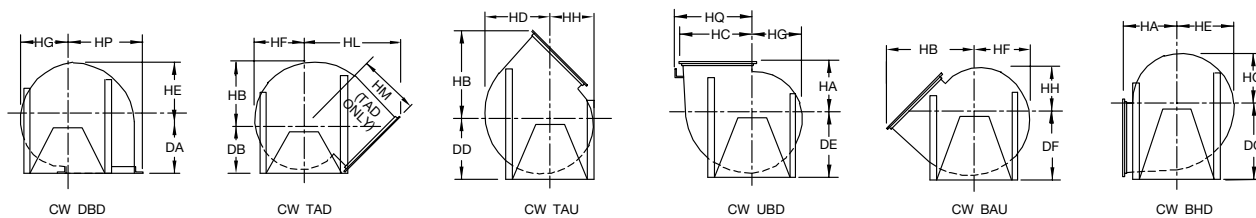
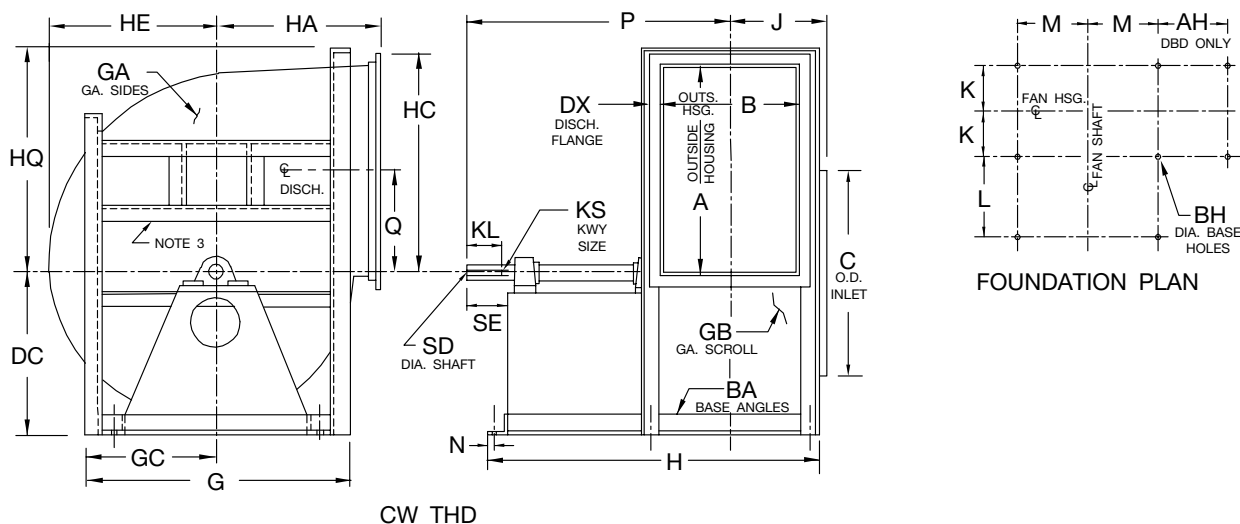
NOTES:

1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
4. For fans with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

| SIZE | L | M | N | P | Q | SD | | SE |
|------|------|-----|----|------|-----|------|-------|-----|
| | | | | | | CL I | CL II | |
| 300 | 683 | 403 | 29 | 1132 | 402 | 50 | 50 | 146 |
| 330 | 749 | 441 | 29 | 1227 | 445 | 50 | 55 | 146 |
| 365 | 749 | 480 | 29 | 1262 | 489 | 50 | 65 | 146 |
| 402 | 762 | 530 | 35 | 1313 | 540 | 55 | 65 | 146 |
| 445 | 803 | 581 | 35 | 1410 | 597 | 65 | 70 | 159 |
| 490 | 813 | 645 | 35 | 1462 | 657 | 70 | 75 | 159 |
| 542 | 930 | 702 | 48 | 1646 | 727 | 75 | 90 | 171 |
| 600 | 924 | 778 | 48 | 1697 | 805 | 75 | 90 | 171 |
| 660 | 991 | 842 | 60 | 1851 | 883 | 90 | 100 | 197 |
| 730 | 1067 | 943 | 60 | 2008 | 978 | 90 | 100 | 210 |

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI Non-Rotatable, Class I & II



NOTES:

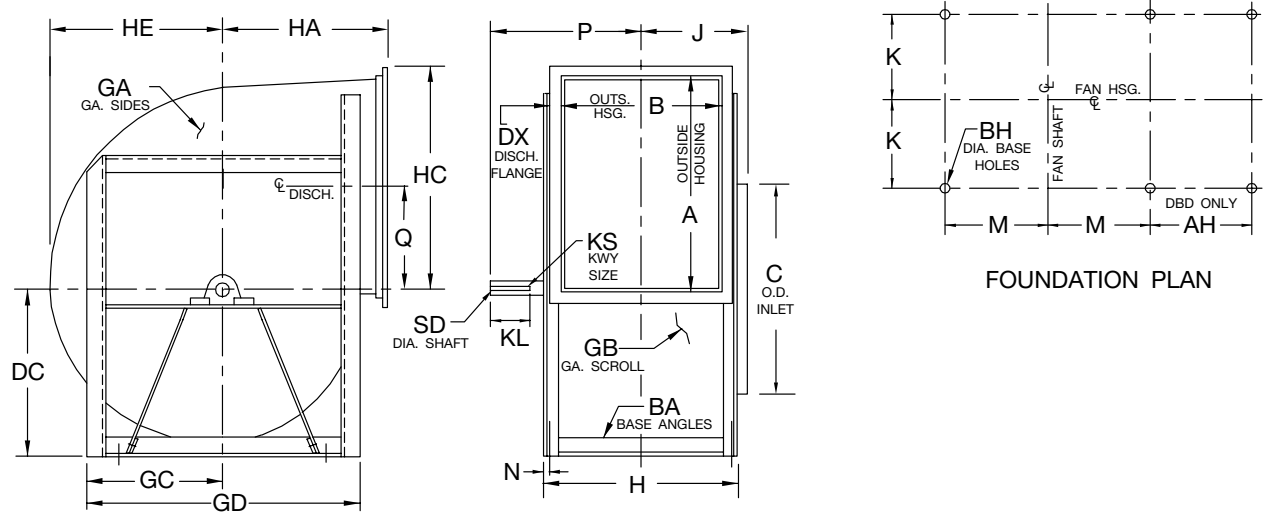
1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. Frame supports vary in construction by size and by discharge position.
4. For fans with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

| SIZE | A | AH | B | BA | BH | C | DA | DB | DC | DD | DE | DF | DG | DX | G | GA | GB | GC |
|------|------|------|------|-----------|----|------|------|------|------|------|------|------|------|----|------|----|----|------|
| 807 | 2170 | 1195 | 1616 | 90 x 125 | 21 | 2156 | 1630 | 1511 | 1600 | 1715 | 1829 | 1943 | 2261 | 64 | 2426 | 3 | 3 | 1213 |
| 890 | 2391 | 1276 | 1781 | 90 x 125 | 21 | 2372 | 1778 | 1664 | 1759 | 1873 | 1988 | 2159 | 2483 | 64 | 2705 | 5 | 3 | 1353 |
| 982 | 2642 | 1365 | 1969 | 125 x 150 | 21 | 2629 | 1975 | 1816 | 1943 | 2032 | 2197 | 2337 | 2750 | 64 | 3099 | 5 | 5 | 1549 |

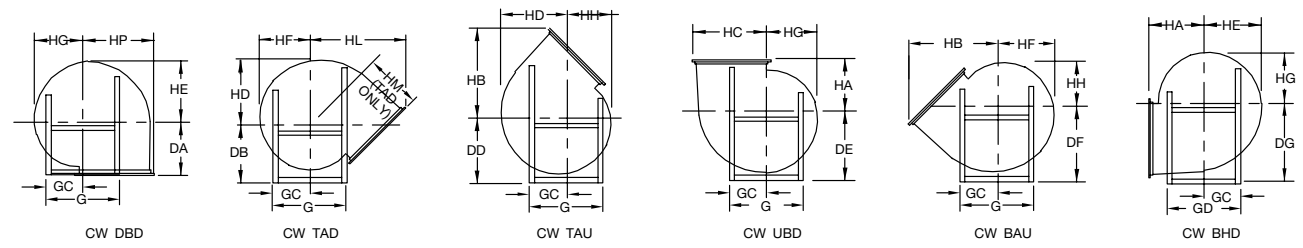
| SIZE | H | HA | HB | HC | HD | HE | HF | HG | HH | HL | HM | HP | HQ | J | K | KL | KS | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|---------|---------|
| | | | | | | | | | | | | | | | | | CL I | CL II |
| 807 | 3013 | 1630 | 2731 | 2230 | 1880 | 1765 | 1661 | 1556 | 1451 | 2888 | 1854 | 2294 | 2229 | 960 | 875 | 203 | 28 x 16 | 32 x 18 |
| 890 | 3255 | 1778 | 2991 | 2451 | 2072 | 1946 | 1830 | 1715 | 1599 | 3185 | 2051 | 2515 | 2451 | 1043 | 957 | 203 | 28 x 16 | 32 x 18 |
| 982 | 3572 | 1975 | 3305 | 2700 | 2288 | 2150 | 2021 | 1892 | 1764 | 3558 | 2330 | 2788 | 2711 | 1162 | 1064 | 203 | 32 x 18 | enq |

| SIZE | L | M | N | P | Q | SD | | SE |
|------|------|------|----|------|------|------|-------|-----|
| | | | | | | CL I | CL II | |
| 807 | 1143 | 1038 | 60 | 2180 | 1083 | 100 | 115 | 229 |
| 890 | 1219 | 1178 | 60 | 2338 | 1192 | 100 | 125 | 229 |
| 982 | 1299 | 1350 | 73 | 2512 | 1316 | 125 | enq | 229 |

Arrangement 3, SWSI Non-Rotatable, Class I & II



CW THD



NOTES:

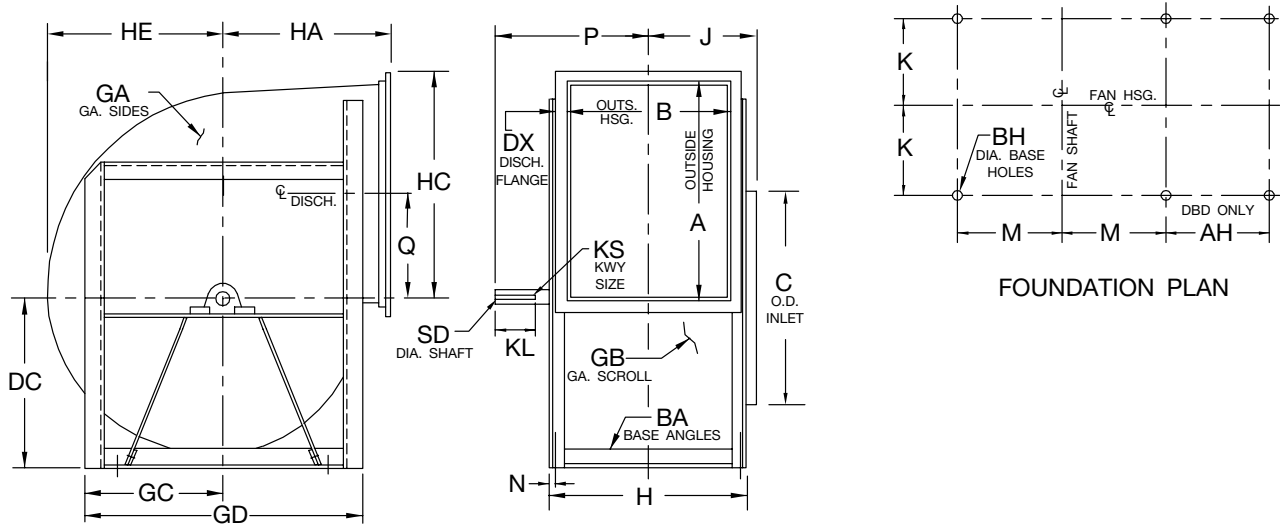
1. Discharge angles are included on all discharges.
2. Inlet bearing bar support is removable.
3. "CW" rotation is shown. "CCW" rotation is similar but opposite.
4. Bearing bar supports may extend beyond base angles. See Drawing AC1000851 for dimensions if space limitations are required for mounting fan.

| SIZE | A | AH | B | BA | BH | C | DA | DB | DC | DD | DE | DF | DG | DX | G | GA | GB | GC |
|------|-----|-----|-----|---------|----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|
| 122 | 330 | 179 | 248 | 38 x 38 | 11 | 337 | 248 | 387 | 260 | 279 | 292 | 311 | 381 | 25 | 502 | 2.0 | 2.0 | 251 |
| 135 | 363 | 197 | 275 | 38 x 38 | 11 | 370 | 273 | 406 | 286 | 305 | 324 | 337 | 413 | 25 | 533 | 2.0 | 2.0 | 267 |
| 150 | 403 | 214 | 303 | 38 x 38 | 11 | 411 | 303 | 425 | 311 | 337 | 356 | 375 | 457 | 25 | 578 | 2.0 | 2.0 | 289 |
| 165 | 443 | 248 | 335 | 38 x 50 | 11 | 451 | 334 | 445 | 343 | 368 | 387 | 413 | 495 | 25 | 616 | 2.0 | 2.0 | 308 |
| 182 | 492 | 275 | 370 | 38 x 50 | 11 | 495 | 368 | 470 | 375 | 400 | 425 | 451 | 546 | 32 | 660 | 2.5 | 2.0 | 330 |
| 200 | 538 | 295 | 405 | 38 x 50 | 14 | 543 | 402 | 495 | 413 | 438 | 464 | 489 | 597 | 32 | 711 | 2.5 | 2.0 | 356 |
| 222 | 598 | 327 | 449 | 50 x 50 | 14 | 603 | 449 | 533 | 457 | 489 | 521 | 559 | 660 | 32 | 794 | 2.5 | 2.0 | 397 |
| 245 | 659 | 359 | 494 | 50 x 50 | 14 | 662 | 495 | 559 | 508 | 540 | 572 | 610 | 718 | 32 | 851 | 2.5 | 2.0 | 425 |
| 270 | 727 | 395 | 543 | 50 x 50 | 14 | 724 | 545 | 597 | 559 | 597 | 629 | 667 | 787 | 38 | 914 | 2.5 | 2.0 | 457 |

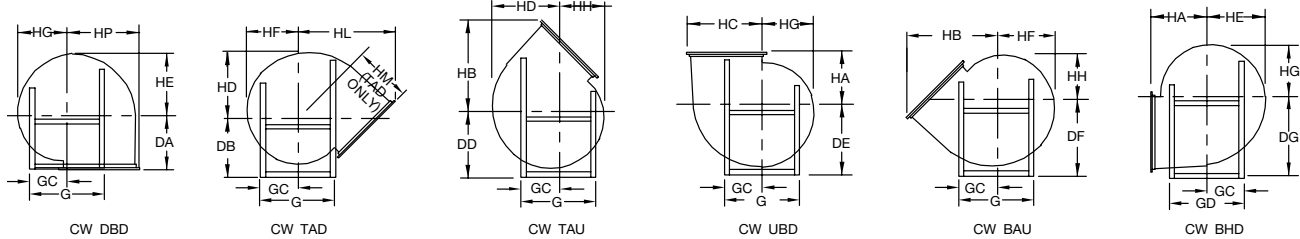
| SIZE | GD | H | HA | HB | HC | HD | HE | HF | HG | HH | HL | HM | HP | J | K | KL | KS | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|---------|----------|
| | | | | | | | | | | | | | | | | | CLASS I | CLASS II |
| 122 | 470 | 324 | 248 | 425 | 354 | 284 | 268 | 252 | 236 | 221 | 572 | 454 | 367 | 189 | 146 | 64 | 8 x 7 | 8 x 7 |
| 135 | 502 | 353 | 273 | 467 | 387 | 313 | 295 | 278 | 260 | 243 | 611 | 476 | 400 | 203 | 160 | 64 | 8 x 7 | 8 x 7 |
| 150 | 546 | 381 | 303 | 516 | 427 | 349 | 327 | 308 | 289 | 270 | 660 | 508 | 440 | 230 | 175 | 76 | 8 x 7 | 8 x 7 |
| 165 | 616 | 438 | 334 | 565 | 467 | 383 | 359 | 338 | 318 | 297 | 708 | 535 | 492 | 246 | 197 | 76 | 8 x 7 | 8 x 7 |
| 182 | 660 | 473 | 368 | 630 | 522 | 424 | 399 | 375 | 351 | 327 | 773 | 572 | 541 | 276 | 214 | 89 | 8 x 7 | 10 x 8 |
| 200 | 711 | 508 | 402 | 686 | 568 | 467 | 440 | 413 | 386 | 359 | 832 | 608 | 588 | 294 | 232 | 89 | 10 x 8 | 10 x 8 |
| 222 | 794 | 552 | 449 | 762 | 629 | 519 | 484 | 456 | 427 | 399 | 916 | 667 | 648 | 316 | 254 | 102 | 10 x 8 | 10 x 8 |
| 245 | 851 | 597 | 495 | 838 | 689 | 568 | 533 | 502 | 470 | 438 | 988 | 706 | 708 | 338 | 276 | 114 | 10 x 8 | 14 x 9 |
| 270 | 914 | 645 | 545 | 926 | 764 | 627 | 589 | 554 | 519 | 484 | 1076 | 759 | 776 | 362 | 300 | 114 | 10 x 8 | 14 x 9 |

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3, SWSI Non-Rotatable, Class I & II (cont'd.)



CW THD



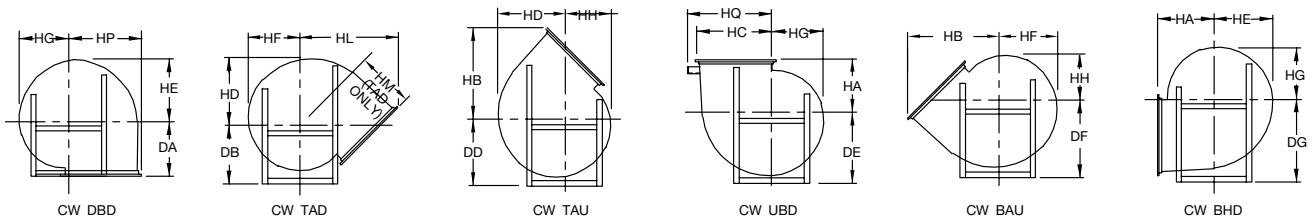
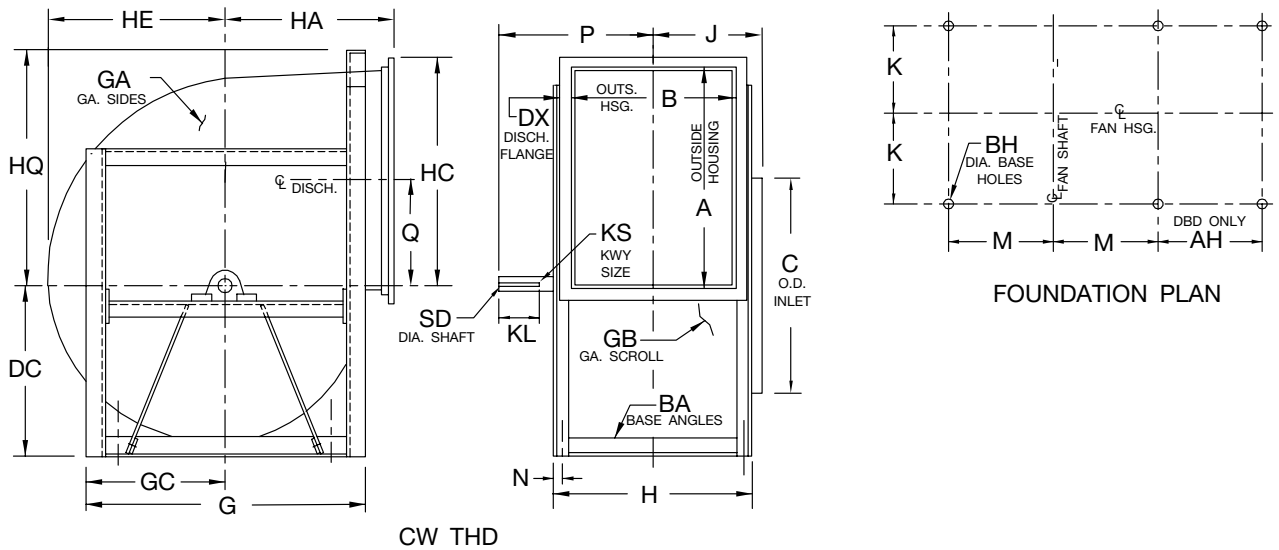
NOTES:

1. Discharge angles are included on all discharges.
2. Inlet bearing bar support is removable.
3. "CW" rotation is shown. "CCW" rotation is similar but opposite.
4. Bearing bar supports may extend beyond base angles. See Drawing AC1000851 for dimensions if space limitations are required for mounting fan.

| SIZE | M | N | P | | Q | SD | |
|------|-----|----|------|-------|-----|------|-------|
| | | | CL I | CL II | | CL I | CL II |
| 122 | 171 | 16 | 254 | 254 | 164 | 25 | 25 |
| 135 | 187 | 16 | 268 | 268 | 181 | 25 | 25 |
| 150 | 210 | 16 | 295 | 305 | 200 | 25 | 30 |
| 165 | 222 | 22 | 311 | 321 | 221 | 25 | 30 |
| 182 | 245 | 22 | 351 | 372 | 245 | 30 | 38 |
| 200 | 270 | 22 | 389 | 389 | 268 | 38 | 38 |
| 222 | 298 | 22 | 424 | 424 | 298 | 38 | 38 |
| 245 | 327 | 22 | 459 | 468 | 329 | 38 | 45 |
| 270 | 359 | 22 | 483 | 492 | 362 | 38 | 45 |

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3, SWSI Non-Rotatable, Class I & II



NOTES:

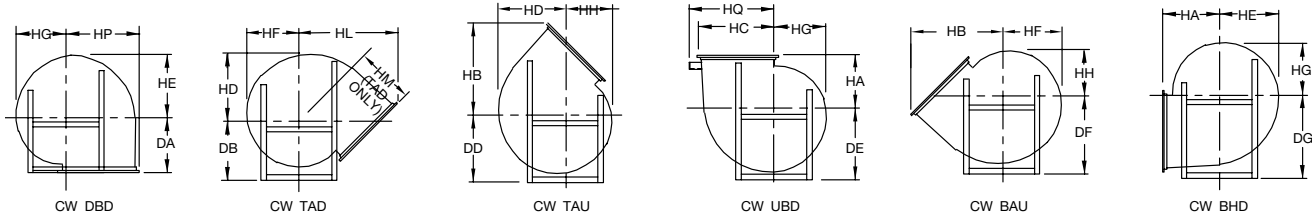
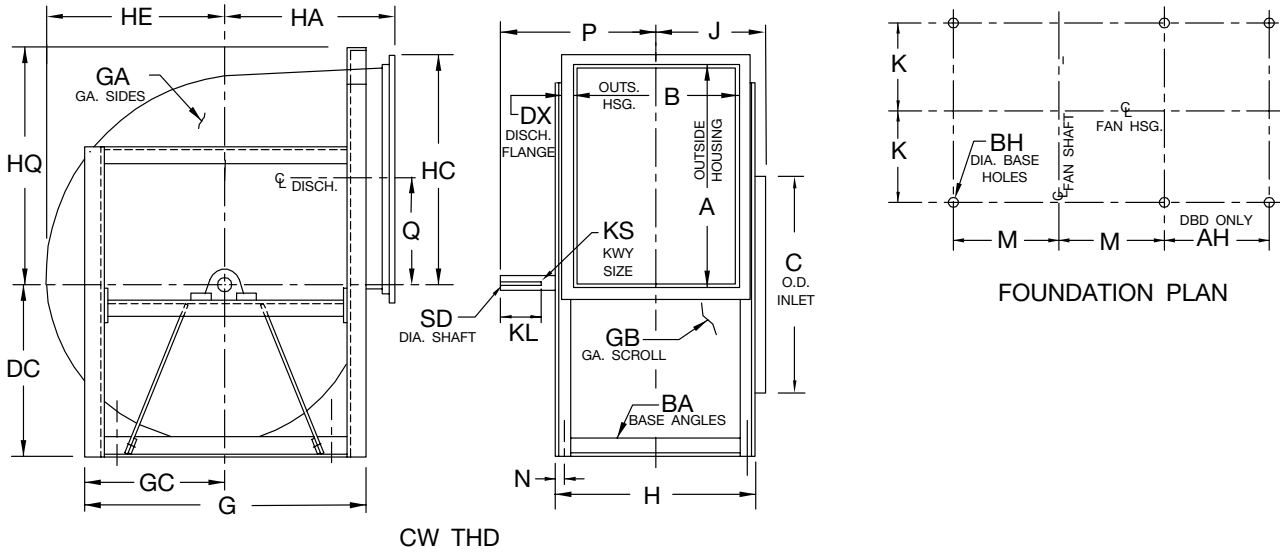
1. Discharge angles are included on all discharges.
2. Inlet bearing bar support is removable.
3. "CW" rotation is shown. "CCW" rotation is similar but opposite.
4. Frame supports vary in construction by size and by discharge position.
5. Bearing bar supports may extend beyond base angles. See Drawing AC1000851 for dimensions if space limitations are required for mounting fan.

| SIZE | A | AH | B | BA | BH | C | DA | DB | DC | DD | DE | DF | DG | DX | G | GA | GB | GC |
|------|------|------|------|----------|----|------|------|------|------|------|------|------|------|----|------|-----|-----|------|
| 300 | 808 | 438 | 605 | 65 x 65 | 14 | 803 | 605 | 660 | 622 | 660 | 724 | 749 | 870 | 38 | 1041 | 3.0 | 2.5 | 521 |
| 330 | 892 | 484 | 662 | 65 x 65 | 14 | 883 | 667 | 705 | 686 | 724 | 787 | 819 | 946 | 38 | 1118 | 3.0 | 2.5 | 559 |
| 365 | 983 | 537 | 734 | 65 x 65 | 14 | 978 | 737 | 775 | 749 | 800 | 851 | 902 | 1041 | 38 | 1219 | 3.0 | 2.5 | 610 |
| 402 | 1083 | 592 | 808 | 75 x 75 | 21 | 1078 | 813 | 826 | 838 | 895 | 940 | 1003 | 1156 | 38 | 1334 | 3.0 | 2.5 | 667 |
| 445 | 1197 | 656 | 894 | 75 x 75 | 21 | 1191 | 899 | 921 | 902 | 978 | 1016 | 1099 | 1270 | 38 | 1435 | 3.0 | 2.5 | 718 |
| 490 | 1319 | 715 | 981 | 75 x 75 | 21 | 1311 | 991 | 984 | 991 | 1073 | 1118 | 1207 | 1391 | 51 | 1562 | 3.0 | 2.5 | 781 |
| 542 | 1457 | 808 | 1089 | 75 x 100 | 21 | 1451 | 1094 | 1073 | 1105 | 1181 | 1245 | 1327 | 1530 | 51 | 1702 | 3.0 | 2.5 | 851 |
| 600 | 1613 | 887 | 1202 | 75 x 100 | 21 | 1604 | 1211 | 1143 | 1219 | 1302 | 1372 | 1461 | 1683 | 51 | 1854 | 3.0 | 2.5 | 927 |
| 660 | 1770 | 994 | 1326 | 90 x 125 | 21 | 1762 | 1332 | 1257 | 1334 | 1416 | 1499 | 1600 | 1861 | 64 | 2032 | 3.0 | 2.5 | 1016 |
| 730 | 1962 | 1083 | 1462 | 90 x 125 | 21 | 1949 | 1473 | 1378 | 1448 | 1568 | 1638 | 1765 | 2051 | 64 | 2235 | 3.0 | 3.0 | 1118 |

| SIZE | H | HA | HB | HC | HD | HE | HF | HG | HH | HL | HM | HP | HQ | J | K | KL | KS | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|---------|----------|
| | | | | | | | | | | | | | | | | | CLASS I | CLASS II |
| 300 | 734 | 605 | 1024 | 845 | 697 | 654 | 616 | 578 | 540 | 1197 | 849 | 870 | — | 406 | 338 | 127 | 14 x 9 | 14 x 9 |
| 330 | 791 | 667 | 1129 | 929 | 765 | 721 | 678 | 635 | 592 | 1295 | 903 | 954 | — | 435 | 367 | 127 | 14 x 9 | 16 x 10 |
| 365 | 861 | 737 | 1242 | 1019 | 851 | 800 | 753 | 705 | 657 | 1410 | 975 | 1045 | — | 484 | 402 | 127 | 14 x 9 | 18 x 11 |
| 402 | 962 | 813 | 1367 | 1119 | 940 | 881 | 829 | 776 | 724 | 1537 | 1056 | 1157 | — | 521 | 446 | 127 | 14 x 9 | 18 x 11 |
| 445 | 1048 | 899 | 1508 | 1233 | 1038 | 972 | 914 | 857 | 800 | 1666 | 1127 | 1272 | — | 576 | 489 | 140 | 14 x 9 | 20 x 12 |
| 490 | 1134 | 991 | 1669 | 1369 | 1140 | 1072 | 1008 | 945 | 881 | 1837 | 1230 | 1394 | — | 621 | 532 | 140 | 16 x 10 | 20 x 12 |
| 542 | 1292 | 1094 | 1838 | 1506 | 1264 | 1186 | 1116 | 1046 | 976 | 2004 | 1329 | 1557 | 1518 | 675 | 598 | 152 | 18 x 11 | 20 x 12 |
| 600 | 1407 | 1211 | 2032 | 1662 | 1397 | 1313 | 1235 | 1157 | 1080 | 2191 | 1437 | 1713 | 1670 | 730 | 656 | 152 | 20 x 12 | 25 x 14 |
| 660 | 1581 | 1332 | 2237 | 1832 | 1534 | 1443 | 1356 | 1268 | 1181 | 2408 | 1575 | 1896 | 1835 | 818 | 730 | 178 | 20 x 12 | 28 x 16 |
| 730 | 1718 | 1473 | 2472 | 2023 | 1700 | 1597 | 1502 | 1407 | 1311 | 2646 | 1719 | 2086 | 2026 | 886 | 799 | 191 | 25 x 14 | 28 x 16 |

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3, SWSI Non-Rotatable, Class I & II



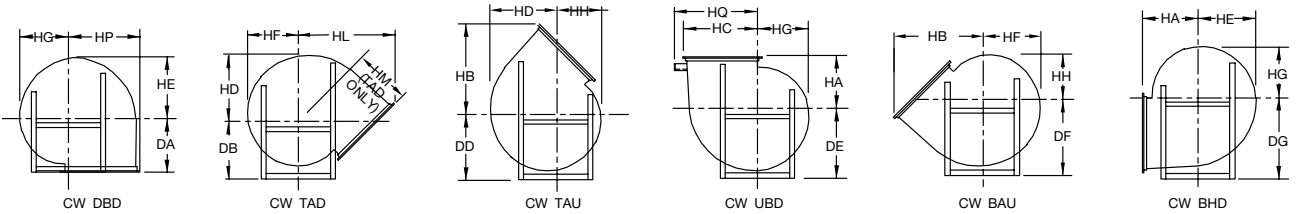
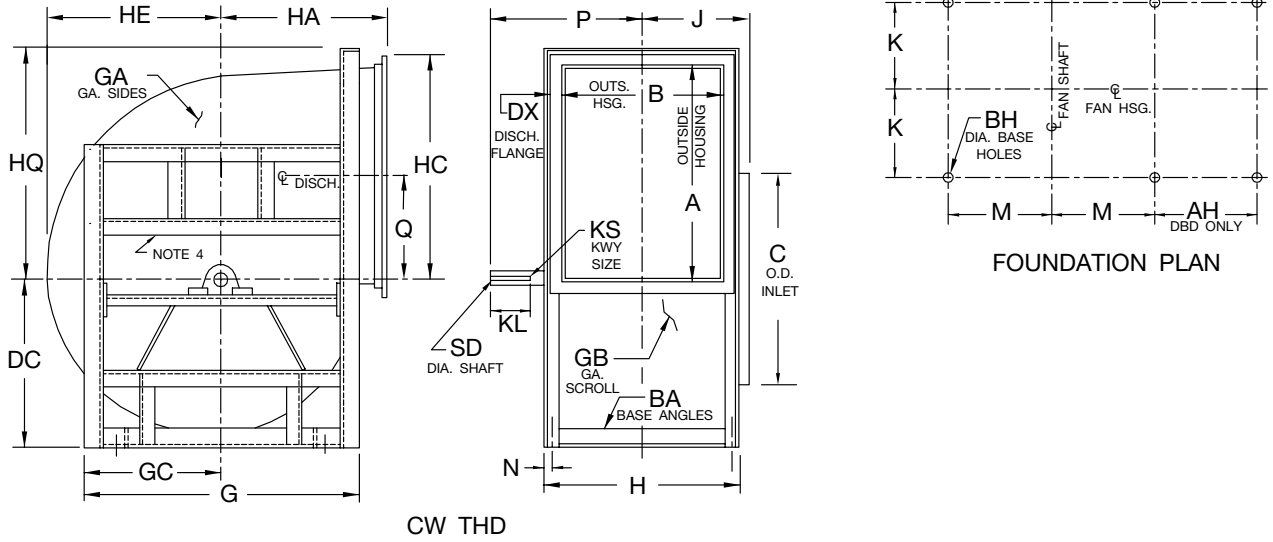
NOTES:

1. Discharge angles are included on all discharges.
2. Inlet bearing bar support is removable.
3. "CW" rotation is shown. "CCW" rotation is similar but opposite.
4. Frame supports vary in construction by size and by discharge position.
5. Bearing bar supports may extend beyond base angles. See Drawing AC1000851 for dimensions if space limitations are required for mounting fan.

| SIZE | M | N | P | | Q | SD | |
|------------|-----|----|------|-------|-----|------|-------|
| | | | CL I | CL II | | CL I | CL II |
| 300 | 403 | 29 | 537 | 540 | 402 | 45 | 50 |
| 330 | 441 | 29 | 565 | 581 | 445 | 45 | 55 |
| 365 | 480 | 29 | 603 | 626 | 489 | 50 | 65 |
| 402 | 530 | 35 | 641 | 664 | 540 | 50 | 65 |
| 445 | 581 | 35 | 697 | 741 | 597 | 50 | 70 |
| 490 | 645 | 35 | 768 | 784 | 657 | 55 | 70 |
| 542 | 702 | 48 | 848 | 857 | 727 | 65 | 75 |
| 600 | 778 | 48 | 902 | 937 | 805 | 75 | 90 |
| 660 | 842 | 60 | 1013 | 1037 | 883 | 75 | 100 |
| 730 | 943 | 60 | 1105 | 1118 | 978 | 90 | 100 |

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3, SWSI Non-Rotatable, Class I & II



NOTES:

1. Discharge angles are included on all discharges.
2. Inlet bearing bar support is removable.
3. "CW" rotation is shown. "CCW" rotation is similar but opposite.
4. Frame supports vary in construction by size and by discharge position.
5. Bearing bar supports may extend beyond base angles. See Drawing AC1000851 for dimensions if space limitations are required for mounting fan.

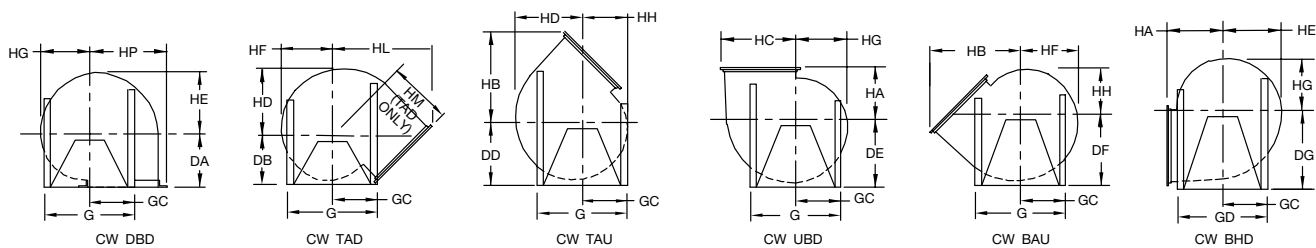
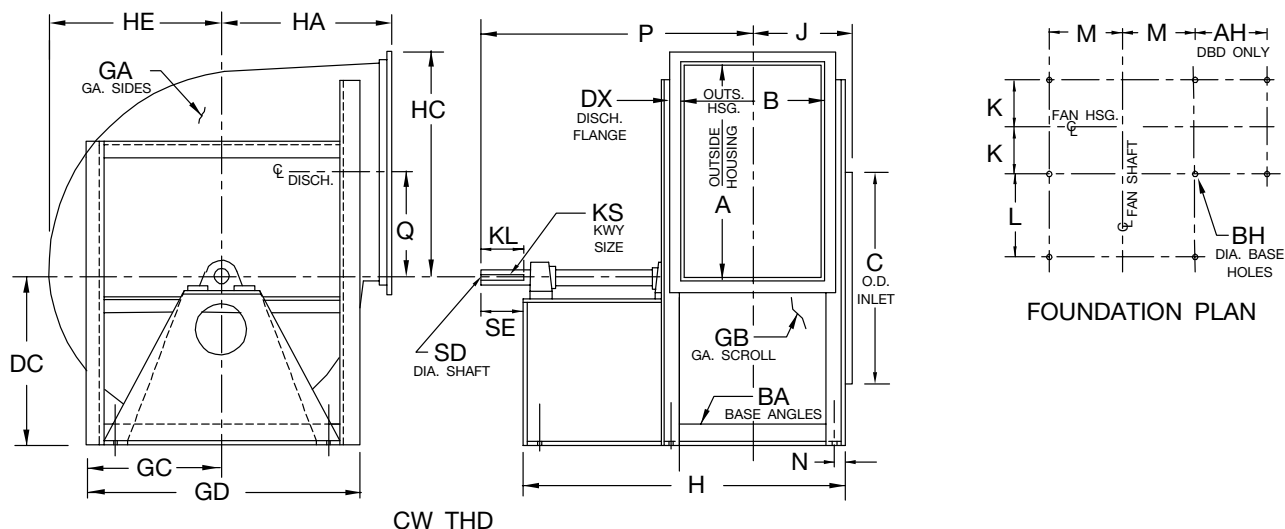
| SIZE | A | AH | B | BA | BH | C | DA | DB | DC | DD | DE | DF | DG | DX | G | GA | GB | GC |
|------|------|------|------|-----------|----|------|------|------|------|------|------|------|------|----|------|----|----|------|
| 807 | 2170 | 1195 | 1616 | 90 x 125 | 21 | 2156 | 1630 | 1511 | 1600 | 1715 | 1829 | 1943 | 2261 | 64 | 2426 | 3 | 3 | 1213 |
| 890 | 2391 | 1276 | 1781 | 90 x 125 | 21 | 2372 | 1778 | 1664 | 1759 | 1873 | 1988 | 2159 | 2484 | 64 | 2705 | 5 | 3 | 1353 |
| 982 | 2642 | 1365 | 1969 | 100 x 150 | 21 | 2629 | 1975 | 1816 | 1943 | 2032 | 2197 | 2337 | 2750 | 64 | 3099 | 5 | 5 | 1549 |

| SIZE | H | HA | HB | HC | HD | HE | HF | HG | HH | HL | HM | HP | HQ | J | K | KL | KS | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|---------|---------|
| | | | | | | | | | | | | | | | | | CL I | CL II |
| 807 | 1870 | 1630 | 2731 | 2230 | 1880 | 1765 | 1661 | 1556 | 1451 | 2888 | 1854 | 2294 | 2229 | 988 | 875 | 203 | 28 x 16 | 32 x 18 |
| 890 | 2035 | 1778 | 2991 | 2451 | 2072 | 1946 | 1830 | 1715 | 1599 | 3185 | 2051 | 2515 | 2451 | 1097 | 957 | 203 | 28 x 16 | 32 x 18 |
| 982 | 2273 | 1975 | 3305 | 2700 | 2288 | 2150 | 2021 | 1892 | 1764 | 3558 | 2330 | 2788 | 2711 | 1216 | 1064 | 203 | 32 x 18 | enq |

| SIZE | M | N | P | | Q | SD | |
|------|------|----|------|-------|------|------|-------|
| | | | CL I | CL II | | CL I | CL II |
| 807 | 1038 | 60 | 1210 | 1259 | 1083 | 100 | 115 |
| 890 | 1178 | 60 | 1289 | 1357 | 1192 | 100 | 125 |
| 982 | 1350 | 73 | 1445 | 1470 | 1316 | 125 | enq |

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI Non-Rotatable, Class III



NOTES:

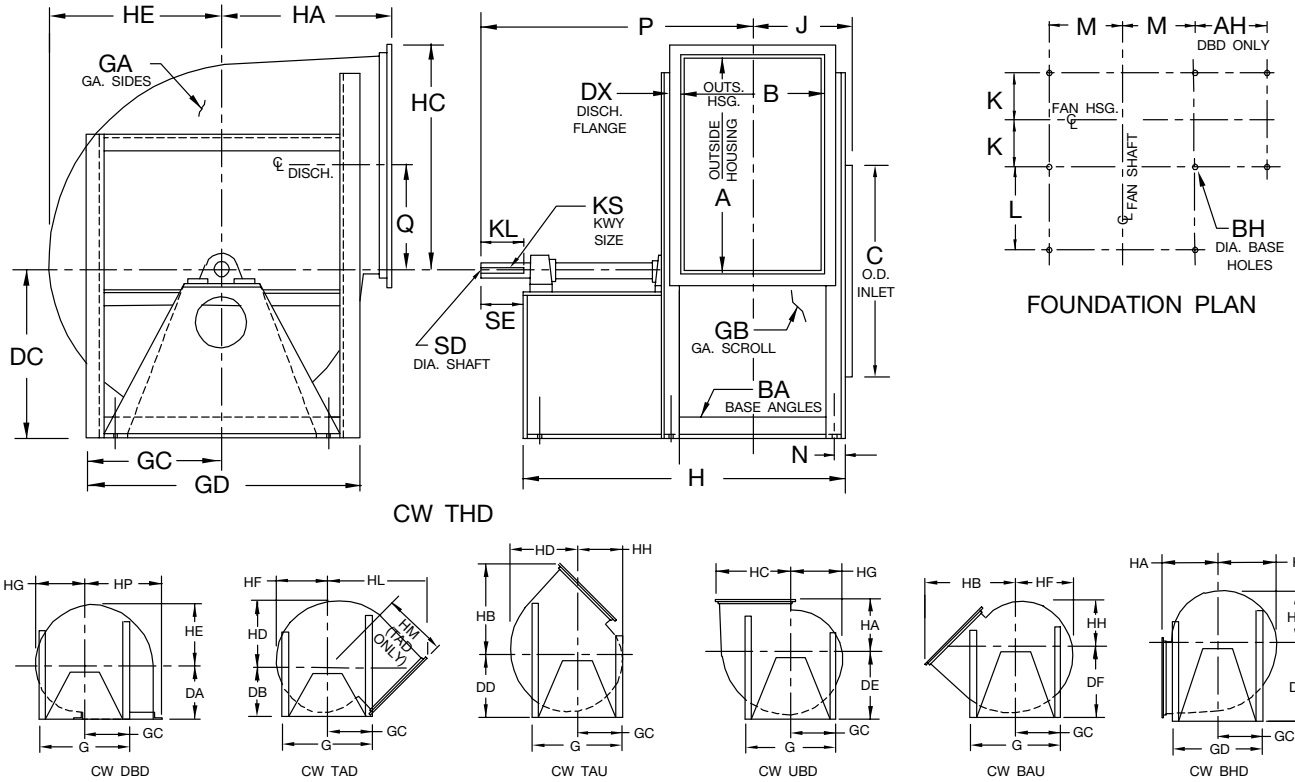
- Discharge angles are included on all discharges.
- "CW" rotation is shown. "CCW" rotation is similar but opposite.
- For fans size 182-330 (except TAD 182-200) with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

| SIZE | A | AH | B | BA | BH | C | DA | DB | DC | DD | DE | DF | DG | DX | G | GA | GB | GC |
|------|-----|-----|-----|---------|----|-----|-----|-----|-----|-----|-----|-----|-----|----|------|----|----|-----|
| 122 | 334 | 194 | 251 | 38 x 50 | 11 | 337 | 248 | 387 | 260 | 279 | 292 | 311 | 394 | 32 | 502 | 3 | 3 | 251 |
| 135 | 367 | 211 | 278 | 38 x 50 | 11 | 370 | 273 | 406 | 286 | 305 | 324 | 337 | 425 | 32 | 533 | 3 | 3 | 267 |
| 150 | 406 | 229 | 306 | 38 x 50 | 11 | 411 | 303 | 425 | 311 | 337 | 356 | 375 | 470 | 32 | 578 | 3 | 3 | 289 |
| 165 | 446 | 249 | 338 | 38 x 50 | 11 | 451 | 334 | 445 | 343 | 368 | 387 | 413 | 495 | 32 | 616 | 3 | 3 | 308 |
| 182 | 495 | 276 | 372 | 50 x 50 | 14 | 495 | 368 | 470 | 375 | 400 | 425 | 451 | 559 | 32 | 686 | 3 | 3 | 343 |
| 200 | 541 | 297 | 406 | 50 x 50 | 14 | 543 | 402 | 495 | 413 | 438 | 464 | 489 | 610 | 32 | 737 | 3 | 3 | 368 |
| 222 | 602 | 341 | 451 | 65 x 65 | 14 | 603 | 449 | 533 | 457 | 489 | 521 | 559 | 673 | 32 | 819 | 3 | 3 | 410 |
| 245 | 665 | 372 | 499 | 65 x 65 | 14 | 662 | 495 | 559 | 508 | 540 | 572 | 610 | 730 | 38 | 876 | 5 | 5 | 438 |
| 270 | 734 | 411 | 548 | 65 x 65 | 14 | 724 | 545 | 597 | 559 | 597 | 629 | 667 | 800 | 38 | 940 | 5 | 5 | 470 |
| 300 | 813 | 452 | 608 | 75 x 75 | 21 | 803 | 605 | 660 | 622 | 660 | 699 | 749 | 883 | 38 | 1067 | 5 | 5 | 533 |
| 330 | 897 | 499 | 665 | 75 x 75 | 21 | 883 | 667 | 705 | 686 | 724 | 762 | 819 | 959 | 38 | 1143 | 5 | 5 | 572 |

| SIZE | GD | H | HA | HB | HC | HD | HE | HF | HG | HH | HL | HM | HP | J | K | KL | KS |
|------|------|------|-----|------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|---------|
| 122 | 473 | 568 | 248 | 432 | 362 | 286 | 270 | 254 | 238 | 222 | 583 | 462 | 381 | 202 | 154 | 76 | 10 x 8 |
| 135 | 505 | 610 | 273 | 473 | 395 | 314 | 297 | 279 | 262 | 245 | 622 | 484 | 414 | 216 | 168 | 76 | 10 x 8 |
| 150 | 549 | 676 | 303 | 522 | 435 | 351 | 329 | 310 | 291 | 272 | 673 | 516 | 454 | 230 | 183 | 89 | 14 x 9 |
| 165 | 588 | 708 | 334 | 572 | 475 | 384 | 360 | 340 | 319 | 298 | 719 | 543 | 494 | 246 | 198 | 89 | 14 x 9 |
| 182 | 686 | 765 | 368 | 630 | 524 | 425 | 400 | 376 | 353 | 329 | 789 | 592 | 543 | 262 | 214 | 114 | 14 x 9 |
| 200 | 737 | 826 | 402 | 687 | 570 | 467 | 441 | 414 | 387 | 360 | 846 | 627 | 589 | 279 | 232 | 114 | 14 x 9 |
| 222 | 819 | 946 | 449 | 764 | 630 | 521 | 486 | 457 | 429 | 400 | 932 | 687 | 662 | 314 | 260 | 127 | 14 x 9 |
| 245 | 876 | 1032 | 495 | 845 | 699 | 572 | 537 | 505 | 473 | 441 | 988 | 699 | 724 | 338 | 284 | 152 | 18 x 11 |
| 270 | 940 | 1134 | 545 | 927 | 767 | 630 | 592 | 557 | 522 | 487 | 1068 | 743 | 792 | 363 | 310 | 152 | 18 x 11 |
| 300 | 1067 | 1257 | 605 | 1026 | 846 | 699 | 656 | 617 | 579 | 537 | 1187 | 833 | 884 | 406 | 346 | 178 | 18 x 11 |
| 330 | 1143 | 1365 | 667 | 1129 | 930 | 767 | 722 | 679 | 637 | 594 | 1286 | 887 | 969 | 435 | 375 | 178 | 20 x 12 |

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI Non-Rotatable, Class III (cont'd.)



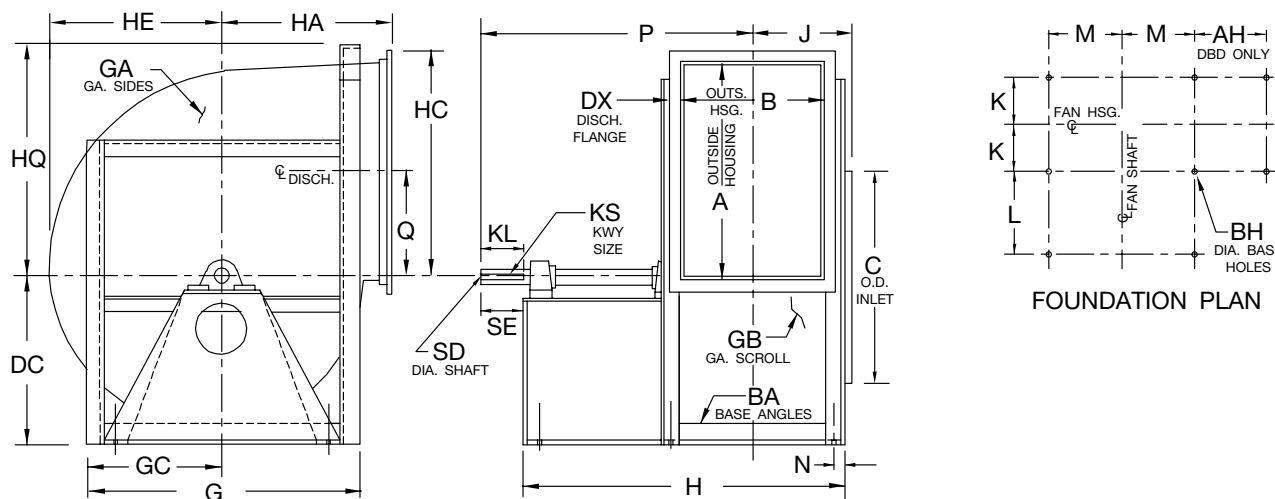
NOTES:

1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For fans size 182-330 (except TAD 182-200) with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

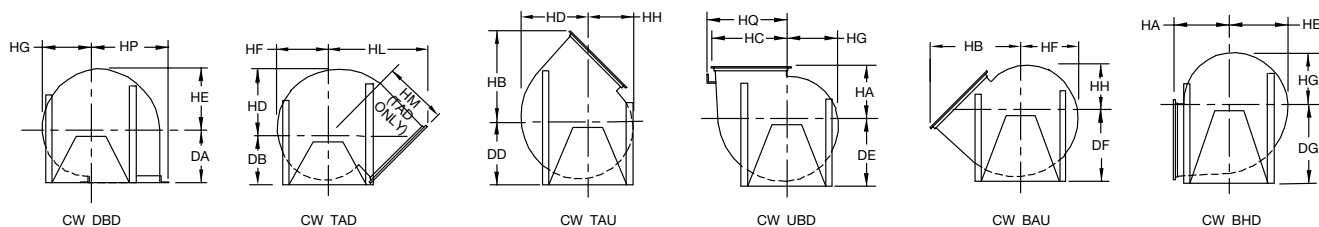
| SIZE | L | M | N | P | Q | SD | SE |
|------|-----|-----|----|------|-----|----|-----|
| 122 | 191 | 165 | 22 | 481 | 164 | 38 | 89 |
| 135 | 203 | 181 | 22 | 508 | 181 | 38 | 89 |
| 150 | 241 | 203 | 22 | 573 | 200 | 45 | 102 |
| 165 | 241 | 222 | 22 | 589 | 221 | 45 | 102 |
| 182 | 267 | 245 | 22 | 656 | 245 | 45 | 127 |
| 200 | 292 | 270 | 22 | 699 | 268 | 50 | 127 |
| 222 | 349 | 292 | 29 | 797 | 298 | 50 | 140 |
| 245 | 387 | 321 | 29 | 884 | 329 | 60 | 165 |
| 270 | 438 | 353 | 29 | 960 | 362 | 60 | 165 |
| 300 | 483 | 397 | 35 | 1073 | 402 | 65 | 197 |
| 330 | 533 | 435 | 35 | 1153 | 445 | 70 | 197 |

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI Non-Rotatable, Class III



CW THD



NOTES:

1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For fans with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

| SIZE | A | AH | B | BA | BH | C | DA | DB | DC | DD | DE | DF | DG | DX | G | GA | GB | GC |
|------|------|------|------|-----------|----|------|------|------|------|------|------|------|------|---------|------|----|----|------|
| 365 | 988 | 551 | 737 | 75 x 75 | 21 | 978 | 737 | 743 | 749 | 800 | 851 | 902 | 1054 | 38 x 38 | 1245 | 5 | 5 | 622 |
| 402 | 1087 | 619 | 811 | 75 x 100 | 21 | 1078 | 813 | 806 | 838 | 895 | 940 | 1003 | 1156 | 50 x 50 | 1334 | 5 | 5 | 667 |
| 445 | 1202 | 683 | 897 | 75 x 100 | 21 | 1191 | 899 | 921 | 902 | 978 | 1016 | 1099 | 1270 | 50 x 50 | 1435 | 5 | 5 | 718 |
| 490 | 1324 | 741 | 984 | 75 x 100 | 21 | 1311 | 991 | 984 | 991 | 1073 | 1118 | 1207 | 1391 | 50 x 50 | 1562 | 5 | 5 | 781 |
| 542 | 1462 | 835 | 1092 | 90 x 125 | 21 | 1451 | 1094 | 1073 | 1105 | 1181 | 1245 | 1327 | 1543 | 65 x 65 | 1702 | 5 | 5 | 851 |
| 600 | 1618 | 914 | 1205 | 90 x 125 | 21 | 1604 | 1211 | 1143 | 1219 | 1302 | 1372 | 1461 | 1695 | 65 x 65 | 1880 | 5 | 5 | 940 |
| 660 | 1775 | 1021 | 1329 | 100 x 150 | 21 | 1762 | 1332 | 1257 | 1334 | 1416 | 1499 | 1600 | 1873 | 65 x 65 | 2032 | 5 | 5 | 1016 |
| 730 | 1965 | 1110 | 1465 | 100 x 150 | 21 | 1949 | 1473 | 1378 | 1448 | 1568 | 1638 | 1765 | 2064 | 65 x 65 | 2235 | 5 | 5 | 1118 |
| 807 | 2173 | 1223 | 1619 | 100 x 150 | 21 | 2156 | 1630 | 1511 | 1600 | 1715 | 1829 | 1943 | 2273 | 65 x 65 | 2451 | 5 | 5 | 1226 |
| 890 | 2394 | 1303 | 1781 | 100 x 150 | 21 | 2372 | 1778 | 1664 | 1759 | 1873 | 1988 | 2159 | 2496 | 65 x 65 | 2731 | 5 | 5 | 1365 |

| SIZE | H | HA | HB | HC | HD | HE | HF | HG | HH | HL | HM | HP | HQ | J | K | KL | KS CLASS I | L | M |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|------------|------|------|
| 365 | 1473 | 737 | 1243 | 1021 | 854 | 802 | 754 | 706 | 659 | 1400 | 959 | 1059 | — | 470 | 410 | 178 | 20 x 12 | 572 | 473 |
| 402 | 1626 | 813 | 1376 | 1134 | 941 | 883 | 830 | 778 | 725 | 1534 | 1035 | 1184 | — | 533 | 461 | 203 | 20 x 12 | 610 | 518 |
| 445 | 1788 | 899 | 1518 | 1248 | 1041 | 973 | 916 | 859 | 802 | 1691 | 1141 | 1299 | — | 576 | 503 | 203 | 25 x 14 | 686 | 568 |
| 490 | 1924 | 991 | 1669 | 1370 | 1141 | 1073 | 1010 | 946 | 883 | 1840 | 1232 | 1421 | — | 619 | 546 | 229 | 25 x 14 | 737 | 632 |
| 542 | 2083 | 1094 | 1849 | 1521 | 1267 | 1187 | 1118 | 1048 | 978 | 2026 | 1343 | 1584 | 1518 | 699 | 613 | 229 | 28 x 16 | 749 | 689 |
| 600 | 2273 | 1211 | 2042 | 1676 | 1399 | 1314 | 1237 | 1159 | 1081 | 2224 | 1468 | 1740 | 1683 | 756 | 670 | 241 | 32 x 18 | 826 | 765 |
| 660 | 2499 | 1332 | 2239 | 1834 | 1537 | 1445 | 1357 | 1270 | 1183 | 2411 | 1576 | 1923 | 1838 | 843 | 744 | 254 | 32 x 18 | 889 | 829 |
| 730 | 2711 | 1473 | 2473 | 2024 | 1702 | 1599 | 1503 | 1408 | 1313 | 2648 | 1721 | 2113 | 2026 | 911 | 813 | 267 | 32 x 18 | 965 | 930 |
| 807 | 2940 | 1630 | 2731 | 2232 | 1883 | 1767 | 1662 | 1557 | 1453 | 2903 | 1873 | 2321 | 2245 | 988 | 889 | 267 | 32 x 18 | 1041 | 1032 |
| 890 | 3178 | 1778 | 2991 | 2453 | 2073 | 1948 | 1832 | 1716 | 1600 | 3199 | 2070 | 2542 | 2464 | 1068 | 970 | 279 | enq | 1118 | 1165 |

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

SWSI

Fans shall be Model BC Backward Inclined, as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

PERFORMANCE — Fans shall be tested in accordance with AMCA 210 and AMCA 300 test codes for air moving devices and shall be licensed to bear the AMCA certified ratings seal for both sound and air.

Fans shall have a sharply rising pressure characteristic extending through the operating range and continuing to rise beyond the efficiency peak to ensure quiet and stable operation. Fans shall have a non-overloading design with self-limiting power characteristics and shall reach a peak in the normal selection area. All fans shall be capable of operating over the minimum pressure class limits, as specified in AMCA Standard 99-2408.

HOUSING — BC fan housings shall be of heavy gauge, continuously welded construction. Housings with lock seams or partially welded construction are not acceptable. Discharge flanges are to be provided for rigidity and duct connection. Housings shall be suitably braced to prevent vibration or pulsation. Housings shall have tapered spun, aerodynamically designed inlet cones or funnels providing stable flow and high rigidity.

Class I and II sizes 270 and smaller shall be of the rotatable design, convertible to 8 standard discharge configurations.

IMPELLER — BC backward inclined impellers shall be single thickness plate type, designed for maximum efficiency and quiet operation, and shall be solid welded to the rim and back plate. Partial welding will not be acceptable on aerofoil or backward inclined blades. All impellers shall be statically and dynamically balanced.

SHAFT — Shafts shall be AISI 1040 or 1045 hot rolled steel, accurately turned, ground, polished, and ring gauged for accuracy. Shafts shall be sized for the first critical speed of at least 1.43 times the maximum speed.

BEARINGS — Bearings shall be heavy duty, grease lubricated, spherical roller or adapter mounted anti-friction ball, self-aligning, pillow block type and selected for a minimum average bearing life L-10 in excess of 40,000 hours at the maximum fan RPM.

DRIVE — Motor sheaves shall be cast iron, variable pitch on applications 7.5 kW and smaller, and fixed pitch on 11 kW and larger. Drives and belts shall be located external to the fan casing and rated for 150% of the required motor rating.

FINISH AND COATING — The entire fan assembly, excluding the shaft, shall be thoroughly degreased and deburred before application of a rust-preventative primer. After the fan is completely assembled, a finish coat of paint shall be applied to the entire assembly. The fan shaft shall be coated with a petroleum-based rust protectant.

ACCESSORIES — When specified, accessories such as belt guards, weather covers, access doors, companion flanges, variable inlet vanes, outlet dampers, piezometer ring airflow measurement device, inlet boxes, shaft coolers, shaft seals, inlet screens, etc., shall be provided by Twin City Fan & Blower to maintain one source responsibility.

When specified, fans shall be supplied with internal or nested type variable inlet vanes for impeller diameters 420 mm and larger. Cantilevered vane blades are to be used through Size 660 to minimize air performance insertion losses and noise. The operating mechanism shall be out of the inlet airstream.

FACTORY BALANCE AND RUN TESTING — All fan impellers shall be statically and dynamically balanced in accordance with ANSI/AMCA 204 “Balance Quality and Vibration Levels for Fans” to a Balance Quality Grade G6.3, (3.8 mm/s rms). All assembled fans are test run at the rated operating speed or at the maximum RPM of the fan. Vibration readings are recorded in the horizontal, vertical and axial directions on both bearings. Trim balancing is performed if necessary to maintain vibration limits. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its BC Backward Inclined fans for at least twelve (12) months from start-up or eighteen (18) months from shipment, whichever occurs first.

DWDI

Fans shall be Model BC Backward Inclined, as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

PERFORMANCE — Fans shall be tested in accordance with AMCA 210 test codes for air moving devices and shall be licensed to bear the AMCA certified ratings seal for air.

Fans shall have a sharply rising pressure characteristic extending through the operating range and continuing to rise beyond the efficiency peak to ensure quiet and stable operation. Fans shall have a non-overloading design with self-limiting power characteristics and shall reach a peak in the normal selection area. All fans shall be capable of operating over the minimum pressure class limits, as specified in AMCA Standard 2408-69.

HOUSING — BC fan housings shall be of heavy gauge, continuously welded construction. Housings with lock seams or partially welded construction are not acceptable. Housings shall be suitably braced to prevent vibration or pulsation. Housings shall have spun, aerodynamically designed inlet cones or inlet venturies for smooth airflow into the impellers.

IMPELLER — Impellers shall have tapered spun impeller cones or shrouds, providing stable flow and high rigidity. Impellers shall be of the non-overloading type. BC backward inclined impellers shall be single thickness plate type, continuously welded to the rim and back plate. Blades shall be designed for maximum efficiency and quiet operation. Partial welding will not be acceptable on aerofoil or backward inclined blades. Smaller sizes may use extruded aluminium blades. All impellers shall be statically and dynamically balanced. The complete fan assembly shall be test balanced at the operating speed prior to shipment.

SHAFT — Shafts shall be AISI 1040 or 1045 hot rolled steel, accurately turned, ground, polished, and ring gauged for accuracy. Shafts shall be sized for the first critical speed of at least 1.43 times the maximum speed.

BEARINGS — Bearings shall be heavy duty, grease lubricated, spherical roller or adapter mounted anti-friction ball, self-aligning, pillow block type and selected for a minimum average bearing life L-10 in excess of 40,000 hours at the maximum fan RPM.

DRIVE — Motor sheaves shall be cast iron, variable pitch on applications 7.5 kW and smaller, and fixed pitch on 11 kW and larger. Drives and belts shall be located external to the fan casing and rated for 150% of the required motor rating.

FINISH AND COATING — The entire fan assembly, excluding the shaft, shall be thoroughly degreased and deburred before application of a rust-preventative primer. After the fan is completely assembled, a finish coat of paint shall be applied to the entire assembly. The fan shaft shall be coated with a petroleum-based rust protectant.

ACCESSORIES — When specified, accessories such as belt guards, access doors, companion flanges, variable inlet vanes, outlet dampers, piezometer ring airflow measurement device, inlet boxes, shaft coolers, shaft seals, inlet screens, etc., shall be provided by Twin City Fan & Blower to maintain one source responsibility.

When specified, fans shall be supplied with internal or nested type variable inlet vanes for impeller diameters 420 mm and larger. Cantilevered vane blades are to be used through Size 660 to minimize air performance insertion losses and noise. The operating mechanism shall be out of the inlet airstream. Double width fans shall have interconnecting linkage to ensure operation in unison.

FACTORY BALANCE AND RUN TESTING — All fan impellers shall be statically and dynamically balanced in accordance with ANSI/AMCA 204 “Balance Quality and Vibration Levels for Fans” to a Balance Quality Grade G6.3 (3.8 mm/s rms). All assembled fans are test run at the rated operating speed or at the maximum RPM of the fan. Vibration readings are recorded in the horizontal, vertical and axial directions on both bearings. Trim balancing is performed if necessary to maintain vibration limits. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its BC Backward Inclined fans for at least twelve (12) months from start-up or eighteen (18) months from shipment, whichever occurs first.

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