

Příloha 13 – Ventilátor

Výběr z katalogu

Zdroj

Získáno 28. Prosinec 2016, z Backward Curved High Volume/Pressure Fan SWSI:
<http://www.tcf.com/products/centrifugal-fans/bcs---backward-curved-high-volume-pressure-fan-swsi>

Fans & Blowers

Twin City

Turning Air Into Solutions.



BACKWARD CURVED HIGH PRESSURE FANS

MODEL BCS

Centrifugal Fans

Model BCS

Backward Curved - High Pressure

The BCS fan from Twin City Fan & Blower is a high efficiency backward curved industrial fan designed for handling relatively clean air in high pressure applications. Typical applications include combustion air, product cooling, moisture blow-off, forced draft on fluid bed boilers, and induced draft after bag-house process blowers.

Because the BCS features a wider impeller and housing, producing a high volume of air at a lower velocity, the need for an expansion evasé is eliminated.

BCS fans are available with a variety of construction options and accessories, offering the versatility and flexibility required in today's industrial applications.

Sizes

419 to 2260 mm impeller diameters

Performance

Airflow to 200 m³/sec at 500 Pa

Static pressure to 9945 Pa

Airstream temperatures to 425°C

Arrangements

1, 3SI, 4, 7SI, 8, 9 and 9F

Drive Configurations

Available in both direct and belt drive configurations.

Construction

- Design 14 — for tip speeds up to 70 m/s
- Design 17 — for tip speeds up to 85 m/s
- Design 22 — for tip speeds up to 110 m/s
- Design 26 — for tip speeds up to 130 m/s

Housings

Heavy-gauge, reinforced, continuously welded housings provide strength and durability for extended service life — a necessity in all commercial and industrial installations.

Outlet flanges for duct-connection as well as rigidity are standard. Inlet collars for slip-joint connection and lifting lugs are also standard. 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 cutoff plates and aerodynamically spun inlet cones provide high efficiency and smooth airflow through the fan.



Arrangement 9F



Arrangement 1
with unitary base
and belt guard

BCS Impeller

The BCS impeller features heavy-gauge steel construction and a non-overloading impeller design, suitable for applications requiring large volumes of air at moderate to high pressures.

The high efficiency impeller features backward curved blades of single thickness, continuously welded to the rim and backplate.

A conical spun shroud (rim) makes BCS fans less susceptible to the performance losses associated with poor inlet conditions.

All BCS impellers are statically and dynamically balanced to grade G6.3 per ANSI S2.19 (3.8 mm/s rms) for smooth operation prior to assembly of the fan, followed by a final balance of the entire rotating assembly.

Shaft

Shafts are AISI-1018, 1040 or 1045 hot-rolled steel accurately turned, ground, polished, and ring gauged for accuracy. Shafts are generously sized for first critical speed of at least 1.43 times the maximum speed for the class.

Bearings

Bearings are heavy-duty, grease-lubricated, anti-friction ball or roller, self-aligning, pillow block type and are selected for minimum average bearing life L10 in excess of 40,000 hours at the maximum fan RPM.

Rotation and Discharge

Both clockwise and counterclockwise rotations are available in various standard discharge positions. See drawings on pages 28-41.

Temperature Limits

Standard construction designed for temperatures up to 150°C. Optional construction available to handle up to 425°C. See page 7.

Outlet Flange

Punched outlet flange is provided as standard construction on all sizes.

Mechanical Run Test & Final Vibration Check

All fans are assembled for a mechanical run test as well as 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.

Special Materials

BCS fans can be constructed of special materials such as aluminum or stainless steel.



BCS Impeller

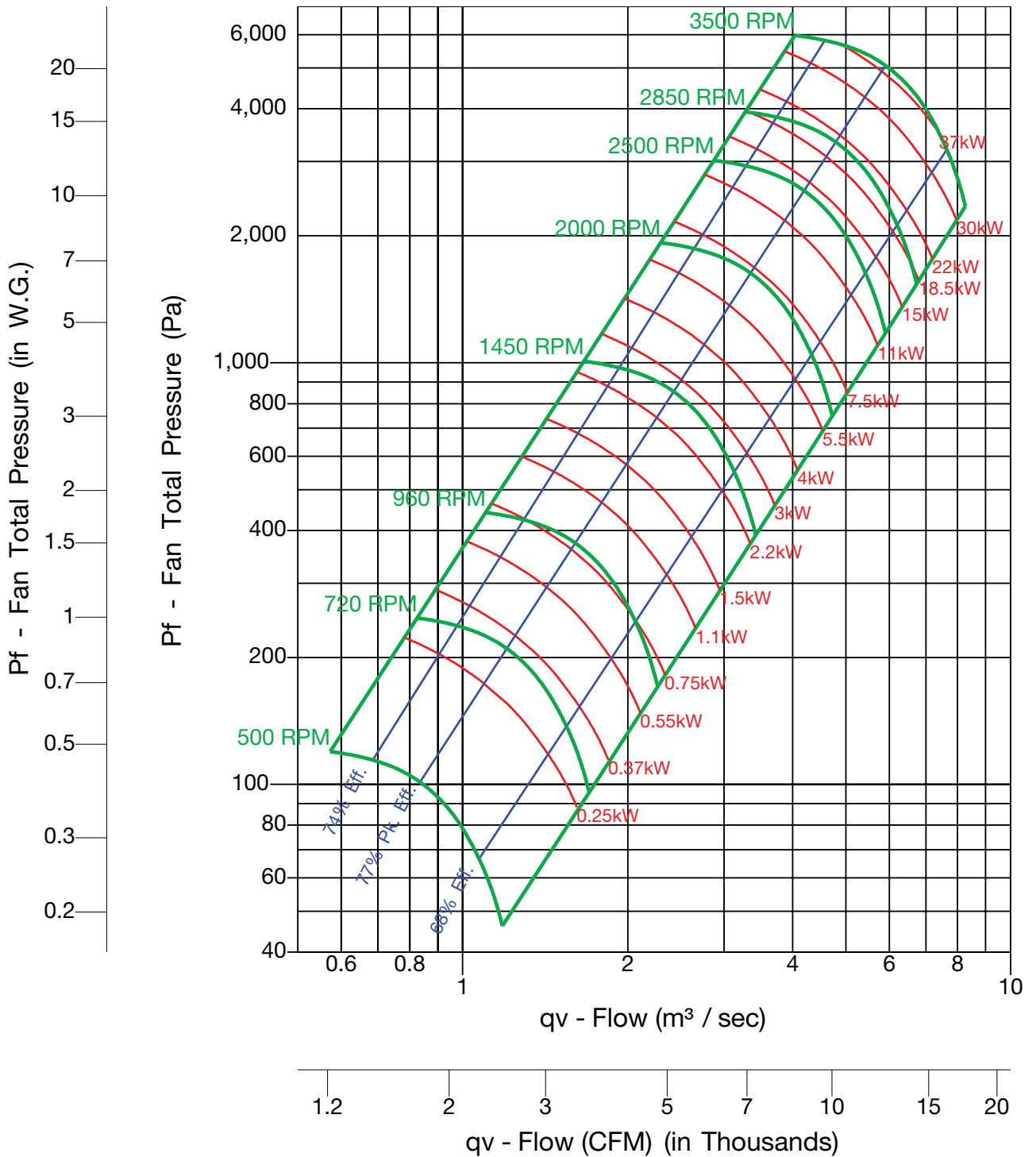


Arrangement 1

Fans & Blowers
Twin City

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BCS 222



Notes:

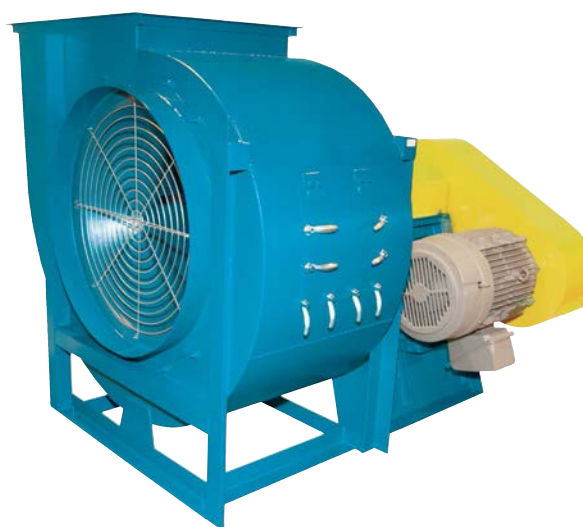
1. Performance certified is for Installation Type B & D: Free or ducted inlet, ducted outlet.
2. Power rating (kW) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound power level ratings shown are in decibels, referred to 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 — Backward Inclined Fans

- 311 mm to 2496 mm impeller diameters
- Airflow to 130 m³/sec
- Static pressure to 5000 Pa
- Airstream temperatures to 427°C
- Arrangements 1, 3, 3F, SI, 4, 7SI, 8, 9, 9F and 10
- Belt and direct drive configurations

See Catalogue M300 for more information.



BAE-SW — Airfoil Fans

- 311 mm to 2496 mm impeller diameters
- Airflow to 130 m³/sec
- Static pressure to 5000 Pa
- Airstream temperatures to 427°C
- Arrangements 1, 3, 3F, 3SI, 4, 7SI, 8, 9, 9F and 10
- Belt and direct drive configurations

See Catalogue M370 for more information.



BCSF — Backward Curved High Pressure Composite Fans

- 419 mm to 1524 mm impeller diameters
- Airflow to 70 m³/sec
- Static pressure to 8450 Pa
- Airstream temperature to 93° C
- Arrangements 1, 8, 9, 9F and 10
- Belt and direct drive configurations

INDUSTRIAL & COMMERCIAL FANS

Centrifugal Fans | Utility Sets | Plenum & Plug Fans | Inline Centrifugal Fans

Mixed Flow Fans | Tubeaxial & Vaneaxial Fans | Propeller Wall Fans | Propeller Roof Ventilators

Centrifugal Roof & Wall Exhausters | Ceiling Ventilators | Gravity Ventilators | Duct Blowers

Radial Bladed Fans | Radial Tip Fans | High Efficiency Industrial Fans | Pressure Blowers

Laboratory Exhaust Fans | Filtered Supply Fans | Mancoolers | Fiberglass Fans | Custom Fans



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