

SPECIFICATION GUIDELINES

BCV - Backward Inclined Utility Set, Belt Driven

Twin City Fan Model BCV, Centrifugal Utility Sets are designed for exhausting relatively clean air in HVAC applications.

Utility sets are designed to meet AMCA requirements for Class L, Class I and Class II construction with both aluminum and steel impellers. Fan housings for Class L fans are galvanized steel while Class I and Class II are coated with a polyester powder coat as standard. BCV fans offer superior air and sound performance and the AMCA certified rating seal for air and sound. The AMCA Certification for air and sound applies to both inlet and outlet sound power levels. Model BCV is available in belt driven configurations. The BCV housing is rotatable. Class L fans can be positioned in any one of five standard fan outlet directions. Class I and Class II fans can be positioned in any one of eight standard fan outlet directions.

Application

Ventilating sets are an excellent choice for general exhaust and supply requirements of commercial and light industrial applications. They are suitable for indoor and outdoor use, with the addition of a weather cover to enclose the motor and drives. Adjustable motor plates are included inside the bearing pedestal. The fans are also more compact and have a smaller footprint than Arrangement 9 fans. Utility sets can be used in conjunction with HEPA filters to create negative pressure rooms in alternate care sites. These fans can also be used in Air Make-Up units in those same alternate care sites.

Sizes and Performance

9" to 60" impeller diameters (228 mm to 1,524 mm)
Airflow to 78,600 CFM (133,500 m³/hour)
Static pressure to 8" w.g. (1,987 Pa)

DCV - Backward Inclined Utility Set, Direct Drive

Twin City Fan Model DCV, Centrifugal Utility Sets are designed for exhausting relatively clean air in HVAC applications.

Twin City Fan's line of utility ventilating sets is one of the most comprehensive in the industry. Utility sets are designed to meet AMCA requirements for Class L construction with aluminum impellers. Fan housings are constructed of galvanized steel as standard. DCV fans offer superior air and sound performance and the AMCA certified rating seal for air and sound. The AMCA Certification for air and sound applies to both inlet and outlet sound power levels. Model DCV is available in direct drive configurations. The DCV housing is rotatable and can be positioned in any one of five standard fan outlet directions.

Application

Ventilating sets are an excellent choice for general exhaust and supply requirements of commercial and light industrial applications. They are suitable for indoor and outdoor use, with the addition of a weather cover to enclose the motor and drives. Seam locked housings are rotatable to five standard discharges. The fans are also more compact and have a smaller footprint than arrangement 9 fans. Utility sets can be used in conjunction with HEPA filters to create negative pressure rooms in alternate care sites. These fans can also be used in Air Make-Up units in those same alternate care sites. Direct drive utility sets are also available with EC motors for quick and simple performance adjustment to the site's specific needs.

Sizes and Performance

9" to 20" impeller diameters (228 mm to 508 mm)
Airflow to 8,246 CFM (14,010 m³/hour)
Static pressure to 2.5" w.g. (622 Pa)

BSI - Square Inline Centrifugal Fan, Belt Driven

Twin City Fan Model BSI is a belt driven, square inline fan suitable for duct installations handling clean ventilation air. Duct collars are provided to eliminate the need for square to round transition fittings.

Model BSI features galvanized steel construction. These units are designed for duct applications handling relatively clean air, including supply, exhaust and return air systems. BSI fans offer high efficiency and quiet operation in a compact design that can be mounted in any position (horizontal, vertical or angular). Model BSI is AMCA certified for air and sound and is UL/cUL 705 listed.

Application

A square inline fan features highly efficient, non-overloading, backward inclined centrifugal impellers precisely matched to a spun inlet venturi. Fan impellers are statically and dynamically balanced. Square inline fans can be used in conjunction with HEPA filters to create negative pressure rooms in alternate care sites. Accessibility: These units can be easily serviced through access panels without removing duct connections.

Sizes and Performance

10.5" to 44.5" impeller diameters (20 mm to 1,130 mm)
Airflow from 230 to 27,500 CFM (425 to 46,722 m³/hour)
Static pressure to 3.5" w.g. (869 Pa)

DSI - Square Inline Centrifugal Fan, Direct Drive

Twin City Fan Model DSI is a direct drive, square inline fan suitable for duct installations handling clean ventilation air. Duct collars are provided to eliminate the need for square to round transition fittings.

Model DSI features galvanized steel construction. These units are designed for duct applications handling relatively clean air, including supply, exhaust and return air systems. DSI fans offer high efficiency and quiet operation in a compact design that can be mounted in any position (horizontal, vertical or angular). Model DSI is AMCA certified for air and sound and is UL/cUL 705 listed.

Application

A square inline fan features highly efficient, non-overloading, backward inclined centrifugal impellers precisely matched to a spun inlet venturi. Fan impellers are statically and dynamically balanced. Square inline fans can be used in conjunction with HEPA filters to create negative pressure rooms in alternate care sites. Direct drive square inline fans are also available with EC motors for quick and simple performance adjustment to the site's specific needs. Accessibility: These units can be easily serviced through access panels without removing duct connections.

Sizes and Performance

10.5" to 18.25" impeller diameters (270 mm to 465 mm)
Airflow from 230 to 5,800 CFM (391 to 9,900 m³/hour)
Static pressure to 2" w.g. (500 Pa)

EPLFN - Plenum Fan, Commercial Duty

Twin City Fan Model EPLFN Commercial Duty Plenum Fan incorporates the same performance and quality characteristics of the E-Series plenum fans, but in a lighter duty, more economical design. The EPLFN offers a competitive cost advantage over full-framed plenum fan designs in light to medium duty applications with static pressures of 12 inches w.g. or less.

The compact direct drive EPLFN offers reduced maintenance by eliminating shafts, bearings and V-belt drives. The EPLFN is a great choice for applications requiring clean airstreams as there is no belt residue in the airstream. The Arrangement 4 configuration offers space savings with a reduced fan footprint. Different performance points can be achieved either through impeller width reduction or varying motor speeds. Model EPLFN is AMCA certified for sound and air.

Application

EPLFN Plenum Fans are used in field-fabricated and factory-built air handling units to pressurize the entire surrounding air plenum. This allows the discharge ductwork to be directly connected to the air handler from any direction. The plenum fan design also saves space by eliminating the fan housing, transitions and diffusers within the air handling unit.

Sizes and Performance

12.25" to 49" impeller diameters (311 mm to 1,245 mm)
Airflow up to 68,800 CFM (116,890 m³/hour)
Static pressure to 12" w.g. (2,984 Pa)



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