

## **SERIES 03P GUIDE SPECIFICATION**

## BACKWARD CURVED CENTRIFUGAL FAN, SINGLE WIDTH, PACKAGED

The belt drive Backward Curved Centrifugal Fan, Single Width, Packaged shall be manufactured by Hartzell Air Movement, Series 03P, Arrg. 10, Class II. Wheels shall be the backward curved. Rotation, as determined by the drive side of the fan, shall be clockwise or counter-clockwise. Fan housing, for sizes 12" through 33", shall be field rotatable and the discharge shall be any of the eight AMCA standard positions. Discharges B.H., B.A.U., and B.A.D. shall be supplied with height adjusting sub base. The fan shall be packaged, completely assembled and ready to install.

The fan housing and base shall be a heavy gauge commercial quality carbon steel suitable for temperatures up to 300° F. and with modifications up to 600° F. The Arrg. 10 with weather cover shall be suitable for temperatures up to 250° F. Arrg. 10 with guards shall be suitable for temperatures up to 600° F. The housing and wheels shall be continuously welded in compliance with AWS D1.1 standard. The wheels shall be commercial quality carbon steel with single thickness airfoil blades and have non-overloading horsepower characteristics. The wheel shall be mounted to the fan shaft with a split taper bushing.

The shafts shall be turned, ground, and polished grade, 1045 steel. The fan bearings shall be heavy duty, pillow block, self-aligning ball type and relubricable for continuous service. Bearings shall be selected for long life at maximum horsepower and speed. The belts shall be an oil, heat, and static-resistant type, oversized for continuous duty. Lifting provisions shall be a standard feature, for ease of handling and installation.

The fan assembly shall be dynamically balanced at the Hartzell factory prior to shipping. Fans shall be balanced in accordance with AMCA Standard 204-96, fan application category BV-3 (comparable to Grade G6.3). Fans shall be manufactured in accordance with Hartzell's standard quality assurance procedures. The fan performance shall be based on tests conducted in Hartzell's AMCA accredited laboratory and conducted in accordance with the latest revision of AMCA Standard 210 for air performance and AMCA Standard 300 for sound. Fans shall be licensed to bear the AMCA Certified Sound and Air Performance Rating Seal.

Standard package unit shall include the following standard features: flanged drilled inlet, flanged drilled outlet, Arrg. 10 weather cover, ceramic felt shaft seal, adjustable motor base with positive motor adjustment bolts, mounting of Hartzell supplied motor and drives, and standard factory run test.

## ACCESSORIES:

- Motors OEDP standard. TEFC and other special motors can be furnished upon request.
- Drain Pipe Coupling Pipe coupling welded to the housing at its lowest point; female pipe has threaded plug.
- Access Door For inspection and cleaning of wheel, bolted and gasketed, or a hinged, quick release type.
- Vibration Isolators Rubber-in-shear or spring type available.



- Flanged Inlet/Outlet Standard feature with mounting holes.
- Guards Provides protection when unit is operating at a working level. Inlet, outlet and drive/shaft guards are available.
- Weather Cover Standard feature. Combines guarding of motor and drive as well as providing protection from the weather.
- Shaft Seals Standard feature, ceramic felt (up to 600° F.).
- High Temperature (250° to 600° F.) Heat slinger provides air movement over inboard bearing and reduces heat conduction through shaft. Motor heat shield protects motor from radiated heat from housing on Arrg. 10 units. Modified covers to allow cooling of Arrg. 10 base.
- Coatings Standard surface coating system shall be phosphatized surface preparation with industrial grade air dry enamel paint. Other coatings are available.