Section 23 34 00

HVAC Fans

part 1 General

1. SUMMARY
   1. The portable fan is the model scheduled with the capacities indicated. The fan shall be furnished with a power cord and variable speed control.
2. RELATED SECTIONS
   1. 23 00 00 Heating, Ventilating, and Air Conditioning (HVAC)
   2. 26 00 00 Electrical
3. REFERENCES
   1. National Fire Protection Association (NFPA)
   2. Underwriters Laboratories (UL)
   3. Canadian Standards Association (CSA)
   4. National Electrical Code (NEC)
   5. International Organization for Standardization (ISO)
   6. Occupational Safety and Health Administration (OSHA)
   7. European Community (CE)
4. SUBMITTALS
   1. Shop Drawings: Drawings detailing product dimensions and weight
   2. Product Data: Specification sheets on the portable fan, specifying electrical requirements, features and benefits, and controller information
   3. Revit Files: Files provided for architectural design
   4. Installation Guide: The manufacturer shall furnish a copy of all operating and maintenance instructions for the fan. All information is subject to change without notice.
   5. Schedule
5. QUALITY ASSURANCE
   1. Certifications
      1. The fan assembly, as a system, shall be Intertek/ETL-certified and built pursuant to the guidelines set forth by UL standard 507, CSA C22.2 No. 60335-1, and CSA C22.2 No. 60335-2-80.
      2. The fan assembly, as a system, shall be CE-compliant.
   2. Manufacturer Qualifications
      1. The fan and any accessories shall be supplied by Big Ass Fans, which has a minimum of twenty (20) years of product experience.
      2. ISO 9001 compliant
6. DELIVERY, STORAGE, AND HANDLING
   1. Deliver product in original, undamaged packaging with identification labels intact. The fan shall be new, free from defects, and factory tested.
   2. The fan and its components shall be stored in a safe, dry location.
7. WARRANTY
8. The manufacturer shall replace any products or components defective in material or workmanship for the customer free of charge (including transportation charges within the USA, FOB Lexington, KY), pursuant to the complete terms and conditions of the Big Ass Fans Warranty in accordance to the following schedule:

|  |  |
| --- | --- |
| Main Fan Unit | 3 years |
| † All reasonable costs of repair or replacement will be paid or reimbursed provided customer obtains pre-approval.  †† The Warranty period for any manufacturer defects or flaws to surface finishes is limited to 1 year.  ††† All products are considered for indoor use only unless specifically specified on the product label.  †††† See the complete warranty for more details. | |

pART 2 pRODUCT

1. MANUFACTURER
   1. Delta T LLC, dba Big Ass Fans, PO Box 11307, Lexington, Kentucky 40575.  
      Phone (877) 244-3267. Fax (859) 233-0139. Website: www.bigassfans.com
2. DESCRIPTION
   1. Complete Unit
      1. Regulatory Requirements: The entire fan assembly shall be Intertek/ETL-certified and built pursuant to the construction guidelines set forth by UL standard 507, CSA C22.2 No. 60335-1, and CSA C22.2 No. 60335-2-80.
      2. The fan shall be equipped with an infinitely variable speed control, heavy-duty casters, a handle, and a fully integrated frame/cage assembly for mobile use.
      3. The diameter of the fan blades shall be 48 in. (1219 mm). The total fan width shall be 55 in.  
         (1397 mm). The total fan height with casters shall be 59.5 in. (1511 mm). The total fan depth shall be 27 in. (686 mm).
      4. The fan shall be equipped with a power cord that fits a standard power outlet.
      5. The standard color of the fan shall be black and yellow.
      6. The fan shall be designed for continuous operation in ambient temperatures of 32–104°F (0–40°C).
      7. The fan shall have an IPX5 rating.
      8. Good workmanship shall be evident in all aspects of construction.
   2. Blades
      1. The fan shall be equipped with six (6) blades made from glass-filled nylon.
      2. The standard color of the blades shall be yellow.
   3. Motor Assembly
      1. The fan motor shall be a direct drive permanent-magnet brushless motor rated for continuous operation at maximum speed.
      2. The fan shall require electrical input of 110–125 VAC or 200–240 VAC, 50/60 Hz, 1 Φ.
   4. Frame and Cage
      1. The fan shall be equipped with a preassembled steel frame with a durable and vented, OSHA-compliant shroud made from HDPE.
      2. The fan’s OSHA-compliant steel cage shall be removable for cleaning and servicing.
      3. The standard color of the frame and cage shall be black.
   5. Casters
      1. The fan shall be equipped with four (4) heavy-duty lockable swivel casters with rubber treads.
      2. The casters shall have a diameter of 6 in. (152 mm).
   6. Controller
      1. The fan controller shall include a rotary dial for controlling the fan’s speed and power and an LED indicator light to identify system faults.

PART 3 EXECUTION

1. PREPARATION
   1. The fan location shall meet the electrical requirements listed in the product installation guide.
2. INSTALLATION
   1. The fan shall be installed and operated according to the product installation guide.
   2. The fan shall be operated on a flat and level surface. During operation, the fan casters shall be in the locked position.
   3. The fan cord shall not be run under carpeting or covered with rugs, runners, or similar coverings. The cord shall not be routed under furniture or appliances.
   4. The fan shall not be operated with a damaged cord or plug.
   5. The fan shall not be located where it will be continuously subjected to wind gusts or in close proximity to the outputs of HVAC systems or radiant heaters.

End of Section