

Fan Powered Series

Basic Features

The FPS, series (constant) volume fan powered air terminal unit features a primary inlet and damper, a fan mounted at the discharge of the unit and an induction port in the wall of the casing. The total air volume delivered by the terminal passes through either the primary inlet, the induction port, or a combination of the two, with the total air flow discharging through the fan(s). The FPS is lined with insulation to provide sound absorption and thermal resistance. Additionally, the unit features a standard induction port attenuator.

Operating Principal

The basic operating principle of the FPS is that as the space cooling load is satisfied and the primary damper begins to close, the terminal fan(s) continues to deliver the same amount of air, pulling warm air from the induction port and mixing it with the reduced cold supply air, thereby reducing (or eliminating) the need for supplemental reheat as the need for warmer air is required at the space.

Sound

An advantage of the FPS is that although the sound levels are somewhat higher than an intermittent fan powered air terminal, occupants are less likely to notice the sound because it is continuous and uninterrupted.

Applications

For the majority of applications, the terminal fan is run continuously during occupied hours. Additionally, the fan may be cycled during unoccupied periods when heating is required. The series (constant) volume fan powered terminal is therefore ideal for reheat applications or where constant room air motion is desired. These applications include: perimeter zones, hallways, entrance ways, rest rooms, etc. These terminals are also ideal for cold air distribution or ice storage systems where lower than normal supply air temperatures can be tempered with warm plenum air or ducted return air.

Features

- Flo-Cross airflow sensor at primary inlet
- Fan airflow range of 60 through 3900 CFM with 6 different casing sizes
- Included in the AHRI Certified Performance program (see <https://www.ahridirectory.org/>)
- List by ETL for safety in accordance with UL 1995
- 22 gauge casing construction (20 gauge optional)
- Industry standard round inlet collars sized to accept either flexible or rigid duct
- Internally lined with 1/2" thick dual density Fiberglas insulation meeting UL 181 and NFPA 90A (Insulguard and Enviroseal liners are optional)
- Induction port attenuator is standard
- Round damper constructed of elastomeric gasket sandwiched between two heavy gauge steel plates provides low leakage
- Two-piece damper shaft utilizes Delrin self-lubricating bearings. Shaft end incorporates a damper position indicator
- Large access panel for complete access to fan and internal chamber of unit
- Single speed, 60 Hz motor suitable for motor voltages of 120 (except size 7), 208, 240 & 277 includes standard motor SCR speed controller
- Optional EON motors are available for casing sizes 3, 6 & 7
- Optional auxiliary heat includes Hot Water and Electric heating coils (Solid State Relay heat is available)