

Fan Powered Parallel

Basic Features

The FPP, parallel (intermittent) 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. In the cooling mode, the total air volume delivered by the terminal passes through the primary inlet. In the heating mode, the fan is energized and draws air through the induction port, while the primary inlet is at minimum. The FPP is lined with insulation to provide sound absorption and thermal resistance.

Operating Principle

The basic operating principle of the FPP is that as the space cooling load is satisfied and the primary damper begins to close, the volume of primary air to the space is reduced. On a call for heating, the damper remains at minimum and the fan is energized thereby drawing warmer plenum air to increase the discharge temperature of the terminal unit. Upon a further call for heat, supplemental hot water or electric heat is utilized to warm the air further.

Sound

The fan in a FPP generally operates at a much lower airflow rate so the sound is generally quieter than a series fan box, but the cycling of the fan can be noticed.

Applications

In the cooling mode, this unit works exactly like a single duct terminal unit. The primary air handler fan must be sized to deliver air to the furthest diffuser. The terminal unit's fan will only energize on a call for heat.

Features

- Flo-Cross airflow sensor at primary inlet
- Fan airflow range of 60 through 3700 CFM with 6 different casing sizes
- Included in the AHRI Certified Performance program (see <https://www.ahridirectory.org/>)
- Listed 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 (1" Fiberglas, Insulguard and Enviroseal liners are optional)
- 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
- Integral backdraft damper
- Large access panel for complete access to fan and internal chamber of unit
- Single speed, 60 Hz motor suitable for motor voltages of 120, 208, 240 & 277 includes standard motor SCR speed controller
- Optional auxiliary heat includes Hot Water and Electric heating coils (Solid State Relay heat is available)

The logo consists of the letters 'FPP' in a stylized, white, cursive font on a black background.