

FAN POWERED CONSTANT TERMINAL UNIT-LOW PROFILE

LPC



LPC

BASIC FEATURES

The LPC, constant volume fan powered air terminal unit features a primary inlet and damper assembly, 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 the primary inlet, the induction port, or a combination of the two with the total air flow discharging through the fan(s). The LPC is lined with insulation to provide sound absorption and thermal resistance

OPERATING PRINCIPLE

The basic operating principle of the LPC 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 air supply, thereby reducing (or eliminating) the need for supplemental reheat.

SOUND

An advantage of the LPC is that although the sound levels are somewhat higher than a variable volume fan powered air terminal, occupants are less likely to notice the sound since it is continuous and uninterrupted.

APPLICATIONS

The LPC has a very low casing height of 10 ½ inches, allowing for installation where the FPC would otherwise be too large. Functionally the FPC and LPC operate the same way. For the majority of applications the terminal fan is run continuously during occupied hours. Additionally, the fan may be cycled on during unoccupied periods when heating is required. The constant volume fan powered terminal is therefore ideal for reheat applications or where constant air motion is desired. These applications include: Perimeter zones, hallways, entrance ways, restrooms, etc. These terminals are also ideal for cold air distribution or ice storage systems where lower than normal supply air temperatures are tempered with warm ceiling plenum air or heated return air, preventing potential room air diffusion problems.

FEATURES

- Patented Flo-Cross® Sensor which features 24 point upstream and downstream sensing with center averaging chambers and exclusive amplification wings (Patent # 4,453,419)
- Three casing sizes allowing a total flow range of 140 to 1600 CFM
- ARI certified performance data (refer to www.ari.org for a free copy of the ARI Applied Directory)
- Listed by ETL for safety in accordance with standard UL 1995
- Heavy duty 20 gauge casing construction
- Industry standard round inlet collars sized to accept either flexible or rigid duct
- Internally lined casing utilizing 0.5" thick dual density fiberglass insulation. Insulation meets or exceeds the safety and erosion requirements of standard UL 181 and NFPA 90A
- Round damper blade constructed of elastomeric gasket sandwiched between two heavy gauge galvanized steel plates, resulting in low air leakage
- Two-piece damper shaft with Delrin self-lubricating bearings. Shaft features a position indicator for easy identification of damper angle
- Large access panel for complete access to fan and internal chamber of unit
- Single speed, 60 Hz motor (120, 208, 240 & 277 Volt)
- Optional ECM (Electronically Commutated Motor) is available for casing size 3 and 4

