SINGLE DUCT AIR TERMINAL UNITS

Single duct air terminal units are designed to regulate the flow of conditioned air in a distribution system. They are available in a wide range of standard control sequences and work equally well in constant and variable volume systems. Single duct air terminals can be specified with hot water coils, electric heat, sound attenuators, access panels and other optional accessories. They offer a low leakage single blade damper and are available in both pressure dependent and pressure independent applications. Single duct air terminal units are recommended for use in duct systems with a static pressure up to 4" wg.

MODEL TH-500
- Available sizes from 4"-16" round, 20" x 16" and 24" x 16" rectangular.
- Available ECO option provides ultra low leakage with high efficiency in sizes 4"-16".
  With the ECO option, each unit is manufactured and tested for both casing and damper leakage. An optional certified leakage test label is available.

MODEL TL-500
- Available in sizes 4"-10" round and 12", 14" and 16" flat oval.
- The maximum height of the TL-500 unit is 12½".

CONSTANT VOLUME AIR TERMINAL UNITS (SERIES)

Constant volume air terminal units provide cooling through the primary air valve. The primary air valve controls the volume of air that is discharged into the terminal unit. The cooled air is delivered to the space through the terminal's fan. When heating is required, the unit provides plenum air that is drawn through the induction inlet. The fan in a constant volume (series) fan powered terminal runs continuously during occupied hours.

An optional ECM motor and controls are available on all models.

MODEL FCI-600
- The model FCI-600 fan powered terminal unit is designed to provide superior comfort to zones with both heating and cooling requirements.
- Available in 6 case sizes with a wide range of primary inlet sizes offering the flexibility to meet both capacity and sound requirements.

MODEL FCL-600
- The model FCL-600 fan powered terminal unit is designed to provide superior comfort control in applications with restricted heights. The FCL-600 also can be selected for projects with limited heights in the ceiling plenum.
- Available in 2 case sizes offering the flexibility to meet both your air flow capacity and sound requirements.

MODEL FCQ-700
- The model FCQ-700 has been engineered to provide noise levels that are superior in the industry.
- All case sizes include exclusively tuned inlet and discharge attenuators. The attenuator adds length, not width, providing easier installation and access.
- The unique Energy Saving 4-piece construction allows for fewer seams, reducing leakage. Every unit includes top and bottom rigid access panels, which allows the unit to be flipped upside down eliminating left hand/ right hand issues in the field.
**VARIABLE VOLUME AIR TERMINAL UNITS (PARALLEL)**

The variable volume air terminal units are designed to provide superior comfort control to zones with heating and cooling requirements. The fan in a variable volume (parallel) terminal unit, runs only upon requirements for heat. The primary air valve controls the volume of cooled air that is discharged into the space. In this type of terminal unit, the primary air does not pass through the fan. When heating is required, the terminal provides plenum air that is drawn through the induction inlet.

**MODEL FVI-500**
- The model FVI-500 is available in 7 case sizes with a wide range of primary inlet sizes offering the flexibility to meet both airflow capacity and sound requirements.
- An optional ECM motor and control is available for improved energy efficiency and control.

**MODEL FVL-600 LOW PROFILE**
- The model FVL-600 low profile air terminal unit is available in 3 case sizes with a wide range of primary inlet sizes offering the flexibility to meet airflow capacity and sound requirements.
- The model FVL-600 also can be selected for projects with limited height ceiling plenums.

**DUAL DUCT AIR TERMINAL UNITS**

Dual duct air terminal units are designed to regulate the flow of conditioned air in dual duct air distribution systems. In a dual duct system, both heated and cooled air are provided to the terminal and mixed to supply the desired discharge temperature. The dual duct units are available in both pressure dependent and pressure independent applications. They are recommended for use in duct systems with static pressure up to 4” wg. The units feature a single blade damper in both heating and cooling inlets.

**MODEL DH-500**
- The model DH-500 high performance dual duct unit has been engineered to provide a 1:30 mixing ratio, the highest in the industry.
- Available in 4"-16" round inlet sizes.

**MODEL DD-500**
- The model DD-500 was designed for both heated and cooled air to be provided to the terminal and mixed in downstream duct work (by others) to provide the desired discharge temperature.
- Available in 4"-16" round inlet sizes.

**BYPASS AIR TERMINAL UNIT**

**MODEL BP-500**
- The model BP-500 bypass air terminal units are designed to achieve VAV delivery of conditioned air to a room in single duct, constant volume air distribution systems.
- The model BP-500 uses a primary air damper working in concert with a bypass port damper.
The model SR-500 is a retrofit terminal designed to fit in existing low pressure/low velocity square or rectangular duct systems. They can also be used in duct systems with static pressure up to 4" w.g.

The model RA-500 retrofit assembly is customized to slip into existing mechanically regulated single or dual duct terminals to convert existing constant volume systems to more energy efficient, variable volume operation. RA assemblies are currently available to fit most of the competitive terminals manufactured from the 60’s to the 80’s. In most applications, units are installed by removing existing volume regulators and inserting the RA valve without disrupting existing ductwork.

The model RT-500 is designed to regulate the flow of conditioned air in single or dual duct air distribution systems and is also used to provide positive or negative pressures in laboratory flow hood applications. The model RT-500 is primarily used to convert mechanically regulated constant volume single or dual duct air terminals to more efficient variable volume air terminals without disrupting total system operation. The RT-500 is easily installed into existing ductwork in front of an existing air terminal.

Metalaire’s air terminal units are available with a wide range of control options and accessories to meet your design requirements. We can provide Pneumatic, Electric, Analog Electronic, factory provided DDC controls or DDC (by others) factory mounted.

Metalaire offers both LONMARK® and BACnet ready DDC controls shipped to your project, addressed and ready to install within the shortest standard lead times in the industry.

A wide range of room sensors, cabling and laptop connection hardware is also available.

METALAIRES Revit® BIM files have been developed to be easily inserted into your Revit® MEP project with organized product families to allow the user to fully utilize the features of Revit® MEP. METALAIRES Revit® BIM Library allows the user the choice of downloading by product type, product series or our complete air terminal unit product line.

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