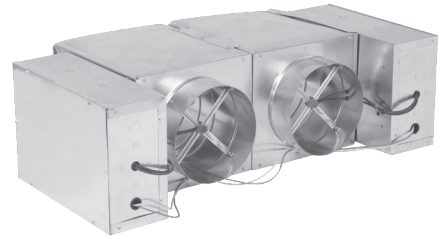


DUAL DUCT TERMINAL UNIT

DSV



BASIC FEATURES

The DSV, dual single duct air terminal, features two primary inlets, one for hot air and one for cold air, each having an integral independent damper. The cold air inlet is commonly known as the “cold deck” and the hot air inlet is known as the “hot deck”. The DSV is lined with insulation to provide sound dampening and thermal resistance.

OPERATING PRINCIPLE

The DSV is capable of delivering variable or constant volume air for the purpose of maintaining a constant space temperature, depending upon the control sequence. For a constant volume application, the cold deck primary damper modulates closed to restrict air flow to the space as conditions are satisfied, while at the same time the hot deck damper opens to maintain a constant flow of air. For variable volume applications, the cold deck primary damper modulates closed as conditions are satisfied and the hot deck does not begin to open until heating is required.

SOUND

The goal in designing VAV systems is to operate air terminals at low pressures and air flows, while still satisfying the design conditions. The DSV is designed for quiet performance at typical operating conditions.

APPLICATIONS

The basic DSV is very flexible because one terminal can be used for interior zones and exterior zones without the additional cost of reheat coils. The DSV is also excellent for improved space comfort and where indoor air quality is a concern. The designer will often pull cool outside air into the cold deck for an economizer cycle and warm plenum air into the hot deck to reduce energy

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)
- A wide variety of sizes (9) results in a total flow range of 50 to 3700 CFM
- Heavy duty 22 gauge casing construction
- Industry standard round inlet collars sized to accept either flexible or rigid duct
- Internally lined casing utilizing 1/2” 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-duty 22 gauge galvanized steel plates, resulting in low air leakage
- Shaft with Delrin bearings. Shaft features a position indicator for easy identification of damper angle
- Slip and Drive connection on the discharge plenum

OPTIONS

- DSV terminals can be furnished without controls, with electronic analog controls, with factory-mounted direct digital controls (supplied by others) or with four function pneumatic controls
- Tuttle & Bailey offers the following liners:
 - 1/2” Dual Density
 - 1” Dual Density
 - Insul-Guard™ (1” rigid Duct Board)
 - Galvanized Sheet Metal (Double Wall)
 - Enviroseal™ (fiber free)
- Hanger brackets for 1/2” threaded rod support

