

SINGLE DUCT

Control Option Code: 00

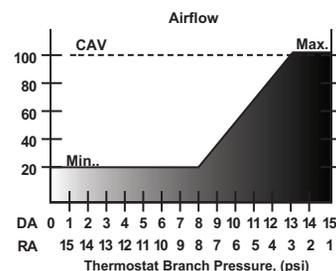
VAV (Variable Air Volume) Cooling

As the room temperature increases, the room thermostat modulates the cold airflow from the minimum to the maximum setting.

CAV (Constant Air Volume) Cooling

The airflow remains constant regardless of changes in duct pressure or room temperature. A room thermostat is not used.

Models: PESV, PECV, POCV



Control Option Code: 00

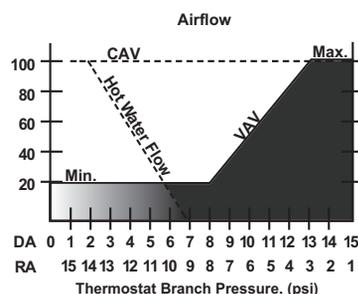
VAV Cooling, Hot Water Reheat

As the room temperature increases, the room thermostat modulates the hot water coil valve toward the closed position. On a further increase in room temperature, the room thermostat modulates the cold airflow from the minimum to maximum setting.

CAV Cooling, Hot Water Reheat

The cold airflow remains constant regardless of changes in duct pressure or room temperature. As room temperature increases, the room thermostat modulates the hot water coil valve toward the closed position.

Model: PESV



Control Option Code: 00

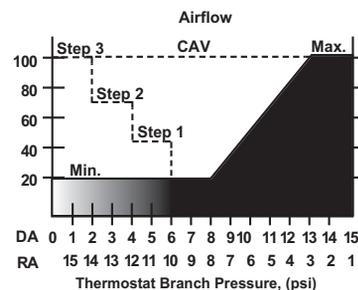
VAV Cooling, Electric Reheat

As the room temperature increases, the room thermostat de-energizes the electric heating one step at a time. On a further increase in room temperature, the room thermostat modulates the cold airflow from the minimum to the maximum setting.

CAV Cooling, Electric Reheat

The cold airflow remains constant regardless of changes in duct pressure or room temperature. As room temperature increases, the room thermostat de-energizes the electric heating coil one step at a time.

Model: PESV



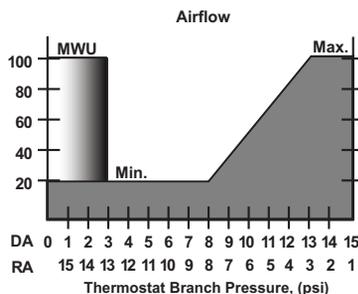
Control Option Code: WU

VAV Cooling with Morning Warm-Up (MWU)

A separate 15 to 25 psi pneumatic signal line to each terminal unit resets the controller setpoint through a signal selector relay for pressure independent hot airflow at the maximum setting. Additional heat may be provided by a heating coil on the discharge of the unit.

When the warm-up signal is turned off, the unit resumes normal cooling operation. As the room temperature increases, the room thermostat modulates the cold airflow from the minimum to the maximum setting.

Models: PESV, PECV, POCV



SINGLE DUCT

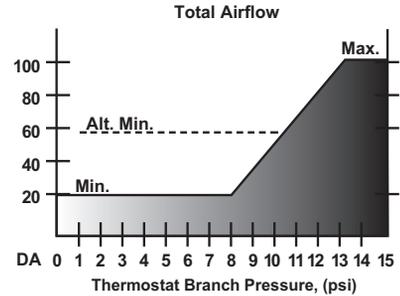
Control Option Code: DM

VAV Cooling, Dual Minimum Flows, with Reheat (Signal Line)

When the signal line is zero psi, a decrease in room temperature modulates the cold airflow from the maximum to the minimum setting.

When the signal line equals the alternate psi, a decrease in room temperature modulates the airflow from maximum to alternate minimum setting. A further decrease in room temperature modulates the hot water valve or steps the electric coil for reheat.

Model: PESV



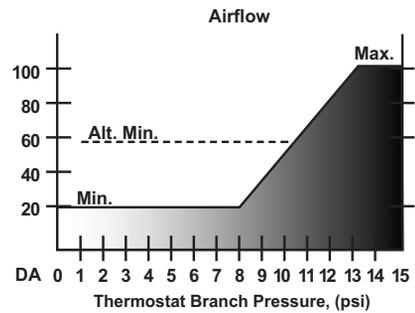
Control Option Code: DP

VAV Cooling, Dual Minimum Flows, with Reheat (Dual Pressure Main)

At the summer main pressure (usually 18 psi) a decrease in room temperature modulates the airflow from maximum down to the minimum setting.

At the winter main pressure (usually 23 psi), a decrease in room temperature modulates the airflow from maximum down to alternate minimum setting. A further decrease in room temperature modulates the hot water valve to open or steps the electric coil on for reheat.

Model: PESV



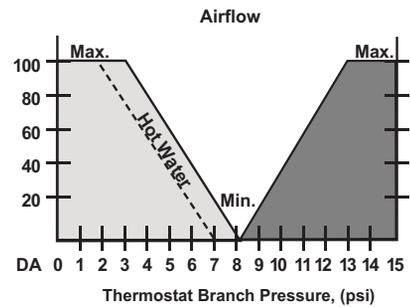
Control Option Code: FF

VAV Cooling and VAV Heating, Equal Maximum Flows (Flip-Flop)

A decrease in room temperature modulates the airflow from maximum to minimum setting (at room thermostat setpoint).

A further decrease in room temperature modulates the airflow from minimum to maximum setting and modulates the hot water control valve to the open position.

Model: PESV



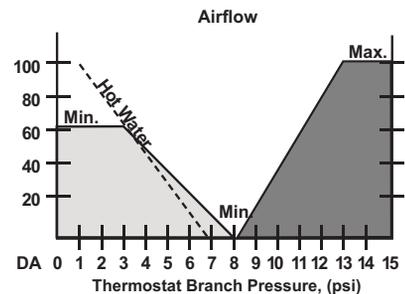
Control Option Code: DO

VAV Cooling and VAV Heating, Dual Maximum Flows

A decrease in room temperature modulates the airflow from maximum to minimum setting (at room thermostat setpoint).

A further decrease in room temperature modulates the airflow from minimum to alternate maximum setting and modulates the hot water control valve to the open position.

Model: PESV



DUAL DUCT

Control Option Code: 00

VAV, No Mixing

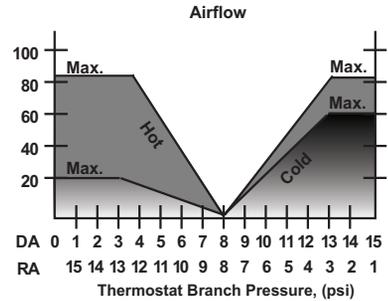
The hot and cold duct controllers are set independently for maximum airflow setting. Both controls are set for zero minimum airflow.

demanding or unequal inlets are required, the hot duct maximum can be adjusted for a lower setting.

Hot and cold controls can be set for equal maximum airflow. If heating loads are less

-  Equal Max. Flow Rates
-  Unequal Max. Flow Rates

Model: PEDV



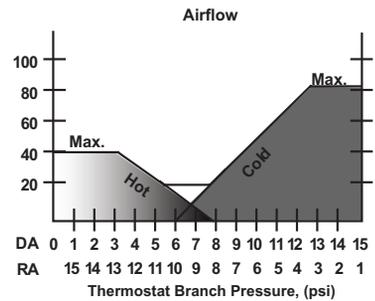
Control Option Code: 00

VAV with Mixing (Attenuator required)

Diagram shows unit with hot inlet and cold total flow sensors. The hot control is still set for zero minimum airflow. The unit minimum is set on the cold inlet control. Unequal inlets are available for the hot inlet.

Maximum airflow can be independently adjusted for equal or unequal settings. Mixing begins when the cold airflow reaches minimum airflow. When the hot airflow is greater than the unit minimum, the cold damper is fully closed. Optional cold inlet and hot total flow sensors are available.

Models: PEDV, PMDV



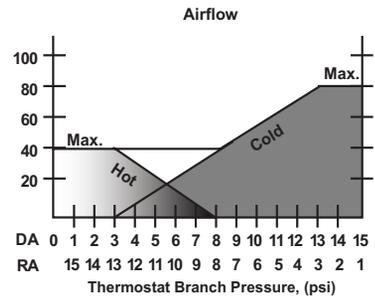
Control Option Code: 00

VAV with Hot Maximum Equal to Unit Minimum Airflow (Attenuator required)

Diagram shows unit with hot inlet and cold total flow sensors. The hot control is still set for zero minimum airflow. The unit minimum is set on the cold inlet control. Unequal inlets are available for the hot inlet.

Maximum airflow for the hot inlet is set equal to unit minimum. Mixing begins when the cold airflow reaches minimum airflow. When the hot airflow is equal to the unit minimum, the cold damper is fully closed. Optional cold inlet and hot total flow sensors are available.

Models: PEDV, PMDV



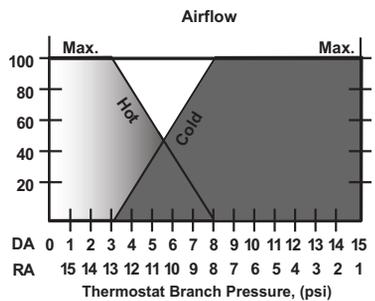
Control Option Code: 00

Constant Air Volume (Attenuator required)

Diagram shows unit with hot inlet and cold total flow sensors. The hot control is set for zero minimum airflow and maximum airflow is equal to total airflow.

The cold control minimum and maximum are set equal to total flow. The room thermostat is connected to the hot control only. If the optional cold inlet and hot total sensors are selected, the mixing occurs between 8 and 13 psi thermostat pressure.

Models: PEDV, PMDC



FAN POWERED

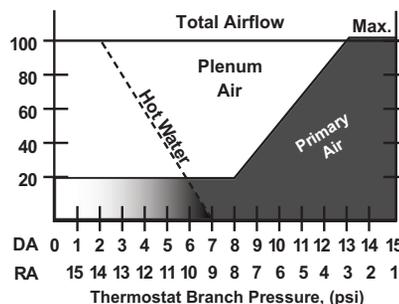
Control Option Code: 00

Constant Volume Fan VAV Terminal with Hot Water Heat

The unit fan delivers a constant airflow to the space at all times. As the room temperature decreases, the primary air valve modulates the airflow from the maximum to the minimum setting.

With a further decrease in room temperature, the room thermostat modulates the water coil valve to the open position.

Models: PTFS, PTQS, PFLS



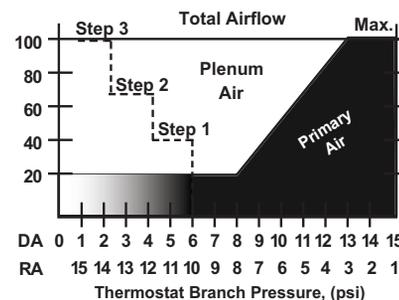
Control Option Code: 00

Constant Volume Fan VAV Terminal with Electric Heat

The unit fan delivers a constant airflow to the space at all times. As the room temperature decreases, the primary air valve modulates the airflow from the maximum to the minimum setting.

With a further decrease in room temperature, the electric heating coil is energized one step at a time.

Models: PTFS, PTQS, PFLS



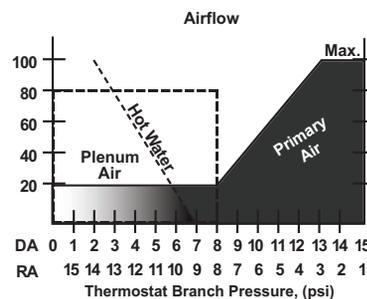
Control Option Code: 00

Variable Volume Fan VAV Terminal with Hot Water Heat

As the room temperature decreases, the primary airflow modulates from maximum to minimum setting (at room thermostat setpoint).

With a further decrease in room temperature, the room thermostat energizes the unit fan and the water coil valve modulates to the full open position.

Models: PTQP, PFLP



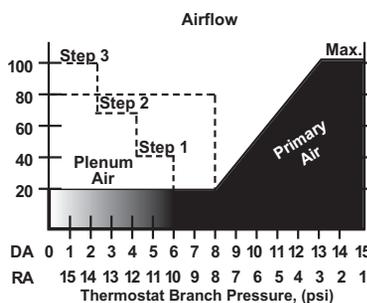
Control Option Code: 00

Variable Volume Fan VAV Terminal with Electric Heat

As the room temperature decreases, the primary airflow modulates from the maximum to the minimum setting (at room thermostat setpoint).

With a further decrease in room temperature, the room thermostat energizes the unit fan and the electric heating coil is energized one step at a time.

Models: PTQP, PFLP



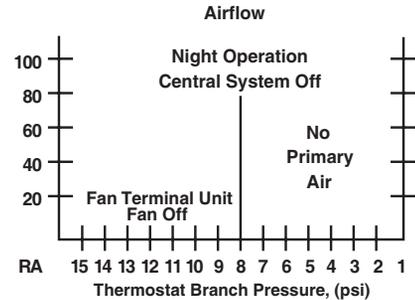
FAN POWERED

Control Option Code: AC

Constant Fan VAV Terminal with Night Shutdown (NSD) PE

Day operation, main air ON. See the control sequence outlined on page O21.

Night operation, main air OFF, primary air fan must be shut off. The unit fan remains off until the main air is restored. Units with electric heat must use reverse acting thermostats to prevent heat operation when fan is off.



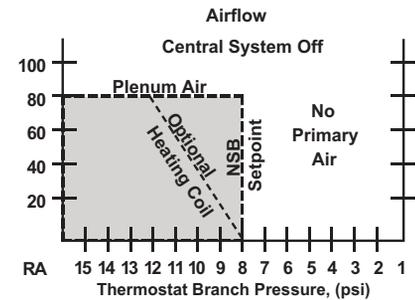
Models: PTFS, PTQS, PFLS

Control Option Code: AE

Constant Fan VAV Terminal with Night Setback (NSB) PEs

Day operation, main air ON. See the control sequence outlined on page O21.

Night operation, main air OFF, Primary air fan must be shut off. The unit fan remains off until the night setback thermostat calls for heat. The unit fan energizes followed by the water or electric heat. Units with electric heat must use reverse acting thermostats to prevent heat operation when fan is off.



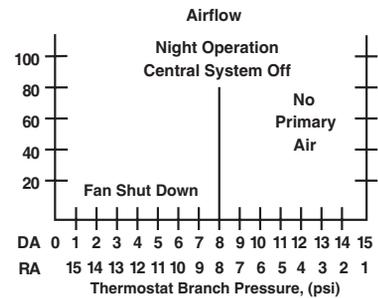
Models: PTFS, PTQS, PFLS

Control Option Code: AD

Constant Fan VAV Terminal with Night Shutdown (NSD) Airflow Switch

Day operation, primary air handler ON. See control sequence on page O21.

Night operation, primary air to the unit is shut off. The unit fan remains off until the primary air is restored.



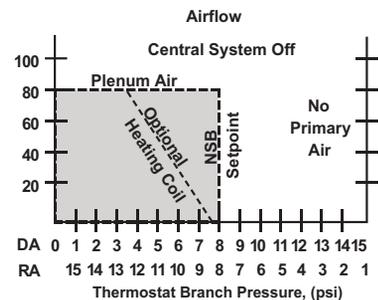
Models: PTFS, PTQP, PFLP

Control Option Code: AF

Constant Fan VAV Terminal with Night Setback (NSB) Airflow Switch

Day operation, primary air handler ON. See the control sequence on page O21.

Night operation, primary air OFF. The unit fan remains off until the night setback thermostat calls for heat. The unit fan energizes followed by the water or electric heat.



Models: PTFS, PTQP, PFLP

