

DUAL DUCT TERMINAL UNIT MODELS: P3230 AND P3240 PNEUMATIC CONTROL PACKAGE: DP2-119

VARIABLE VOLUME • PRESSURE INDEPENDENT • DUAL MAXIMUM WITH MIXING AT MINIMUM FLOW • TOTAL AIR SENSING (COLD DECK MAKE-UP) • RIGHT HAND COLD DECK DIRECT ACTING THERMOSTAT • DA/NC, DA/NO

The hot and cold duct controllers may be set for equal or unequal maximum flow rates. When the space temperature is hot, the cold duct is controlling at the maximum set point. As the space temperature falls, the cold damper closes to its minimum cfm set point. The hot duct minimum flow rate is zero at 8 psi, while the cold duct minimum is set at the required total air minimum setting at 8 psi. Since the cold air velocity sensor is located downstream in the mixer section of the unit, the signal it sends to the cold duct controller represents total air flow. Therefore, as the output pressure falls below 8 psi and hot air is added to the total flow, the cold duct damper begins to close again, in order to hold the total air flow at the cold duct minimum setting. As the thermostat calls for still more heating, the hot air flow, which is not under the control of the downstream sensor, eventually exceeds the cold duct minimum, at which point the cold duct damper is fully closed.

