

DUAL DUCT TERMINAL UNIT MODELS: P3230 AND P3240 PNEUMATIC CONTROL PACKAGE: DP2-102

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

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

