

CONTROL SEQUENCE 1P3 • VAV COOLING WITH PROPORTIONAL HOT WATER HEAT (CONTINUOUS OPERATION) • DA/NO • 3000 CONTROLLER

Sequence of Operation:

The unit fan will deliver a constant volume to the space at all times. With space temperature at set point, unit delivers minimum cooling airflow and maximum induced plenum air.

On a rise in space temperature, the thermostat regulates the controller to increase primary airflow. As more cold air is supplied to the fan section, less warm air is induced from the ceiling plenum.

When the space temperature is warm, the primary air damper is controlling at the maximum airflow setting (usually the same as the fan volume setting and no plenum air is induced).

As the space temperature decreases, the damper modulates back towards the minimum airflow setting and as less cold air is supplied to the fan section, more warm air is induced. If room temperature continues to drop, minimum primary airflow is maintained and the hot water valve modulates open.

Primary airflow is held constant in accordance with thermostat demand. Any changes in volume due to static pressure fluctuations are sensed and compensated for, resulting in pressure independent control.

Note:

Constant volume series terminal fans should be electrically or pneumatically field interlocked with the central fan system, to prevent backflow of primary air into the ceiling plenum and to prevent possible backward rotation of the terminal fan.

SCHEDULE TYPE:				
PROJECT:				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	10 - 18 - 07	3500	12 - 2 - 02	35SWCD-1P3

Options:

Two Pipe Thermostat (Vertical Mount. Includes backing plate for 2" x 4" electrical box).

CTC-1621-103 °F scale plate

CTC-1621-113 °C scale plate

