

PNEUMATIC CONTROL

FAN POWERED TERMINAL UNIT • SERIES FLOW CONSTANT VOLUME • PRESSURE INDEPENDENT MODELS: 35S, 35SST, 37S AND 37SST 1P3

LINE

VOLTAGE

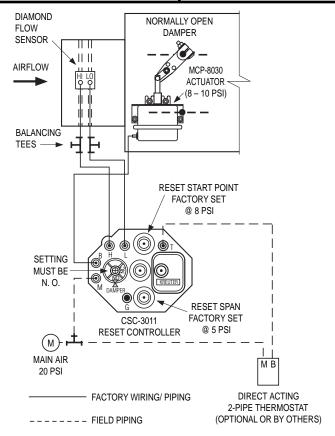
TOGGLE

DISCONNECT

SWITCH (OPTIONAL)

SPEED

CONTROLLER



CONTROL SEQUENCE 1P3 • VAV COOLING (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.

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.

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Ī	80 -		TOTAL AIRFLOW	MAX.
	ou -		, \$ /	CLG.
EASE	60 -		A STATE OF THE STA	
NCR	40 -		i	
ŏ,	20 -	MIN.	No. Co. No.	
AIRFLOW INCREASE				;
-	0 -	,	1	10 15

Dimensions are in inches (mm).

THERMOSTAT OUTPUT PRESSURE, PSI

SPACE TEMPERATURE INCREASE -

SCHEDULE TYPE:
PROJECT:

 ENGINEER:
 DATE
 B SERIES
 SUPERSEDES
 DRAWING NO.

 CONTRACTOR:
 10 - 18 - 07
 3500
 12 - 2 - 02
 35SCD-1P3

Options:

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

CAPACITOR

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☐ CTC-1621-103 °F scale plate

FAN

MOTOR

☐ CTC-1621-113 °C scale plate