

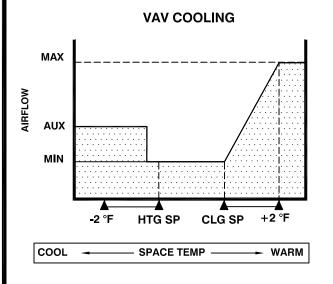


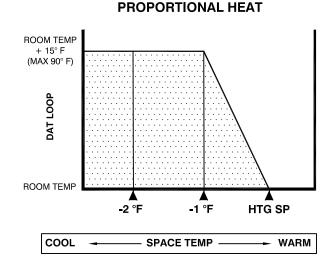
Control Package
SD - D - 8006D

- BACNET DIGITAL CONTROLS
- PRESSURE INDEPENDENT

• SENSOR STE-6010W80

- VAV COOLING (& OPTIONAL VAV HEATING CHANGEOVER)
- PROPORTIONAL ELECTRIC HEAT (DISCHARGE TEMPERATURE LIMITING)





SEQUENCE OF OPERATION

TO ACCESS CONTROLLER SET POINTS AT THE LOCAL LEVEL, TEMPORARILY CONNECT DIGITAL SENSOR STE-8001W80 AS A SERVICE TOOL. SEE SENSOR USER MANUAL FOR DETAILS.

THE WALL SENSOR SIGNALS THE CONTROLLER IN RESPONSE TO THE SPACE TEMPERATURE.

VAV COOLING (PRIMARY < 72° F)

- 1. AS THE SPACE TEMPERATURE INCREASES FROM THE COOLING SET POINT TO $\pm 2^{\circ}$ F ABOVE THE COOLING SET POINT, THE DAMPER OPENS FROM MINIMUM COOLING AIR FLOW TO MAXIMUM COOLING AIR FLOW. ABOVE (CLG SP $\pm 2^{\circ}$ F), THE DAMPER MAINTAINS MAXIMUM FLOW.
- 2. MINIMUM AIR FLOW IS MAINTAINED WHEN THE SPACE TEMPERATURE IS BETWEEN THE HEATING AND COOLING SET POINTS.
- 3. AS THE SPACE TEMPERATURE DECREASES BELOW HEATING SET POINT TO -2° F BELOW THE HEATING SET POINT, THE ELECTRIC HEATER OUTPUT INCREASES FROM 0% TO 100% AS THE DAT LOOP INCREASES TO 100%. AS THE SPACE TEMPERATURE REVERSES BACK TOWARDS THE HEATING SET POINT, TIME PROPORTIONING HEAT DECREASES TO 0%. THE PROGRAMMABLE AUXILIARY AIR FLOW RATE IS MAINTAINED DURING HEATING.
- 4. WITH DISCHARGE AIR TEMPERATURE LIMITING (DAT) ENABLED, THE DISCHARGE AIR TEMPERATURE IS DETERMINED BASED ON THE DAT LOOP. THE LEAVING AIR TEMPERATURE SET POINT IS LIMITED TO A MAXIMUM OF 15° F ABOVE THE SPACE TEMPERATURE WITH A MAXIMUM TEMPERATURE OF 90° F.

JOB NAME: SUBMITTED BY: DATE: DWG #: SD-D-8006D.2

REV: -

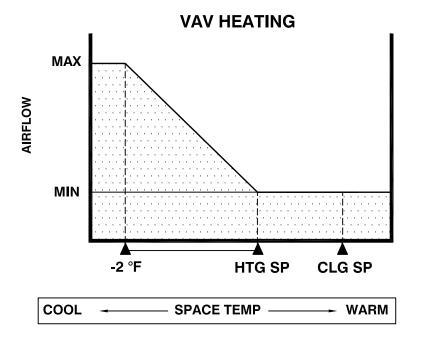
| DATE: 3-29-17

SD - D - 8006D

- BACNET DIGITAL CONTROLS
- PRESSURE INDEPENDENT

• SENSOR STE-6010W80

- VAV COOLING (& OPTIONAL VAV HEATING CHANGEOVER)
- PROPORTIONAL ELECTRIC HEAT (DISCHARGE TEMPERATURE LIMITING)



VAV HEATING (PRIMARY AIR $> 76^{\circ}$ F)

- 1. AS THE SPACE TEMPERATURE DECREASES FROM THE HEATING SET POINT TO -2° F BELOW THE HEATING SET POINT, THE DAMPER OPENS FROM MINIMUM HEATING AIR FLOW TO MAXIMUM HEATING AIR FLOW. ABOVE THE HEATING SET POINT, THE DAMPER MAINTAINS MINIMUM FLOW.
- 2. THE CHANGEOVER TEMPERATURE TO INDEX TO VAV COOLING OR VAV HEATING IS ADJUSTABLE (DEFAULT IS 74° F). COOLING MODE IS ENABLED WHEN THE SUPPLY AIR TEMPERATURE IS AT LEAST -2° F BELOW THE CHANGEOVER TEMP. HEATING MODE IS ENABLED WHEN THE SUPPLY AIR TEMPERATURE IS AT LEAST +2° F ABOVE THE CHANGEOVER TEMP.
- 3. THE ELECTRIC DUCT HEATER IS LOCKED OUT DURING VAV HEATING MODE.

UPON LOSS OF POWER, DAMPER FAILS IN PLACE.

JOB NAME: SUBMITTED BY:

DATE:

DWG #: SD-D-8006D.3

REV: -

DATE: 3-29-17