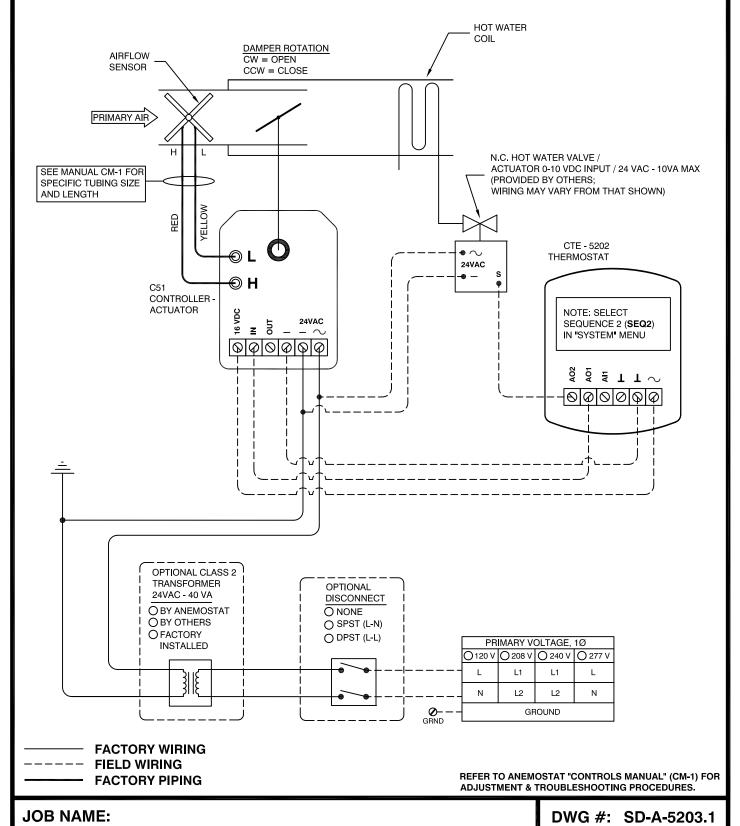


Control Package

SD - A - 5203

- SINGLE DUCT
- ANALOG ELECTRONIC CONTROLS
- VAV COOLING

- PRESSURE INDEPENDENT
- MODULATING (0-10 VDC) HOT WATER HEAT
- AIR FLOW SETPOINTS ADJUSTED AT THERMOSTAT



SUBMITTED BY:

DATE:

В

3-2-2017

REV:

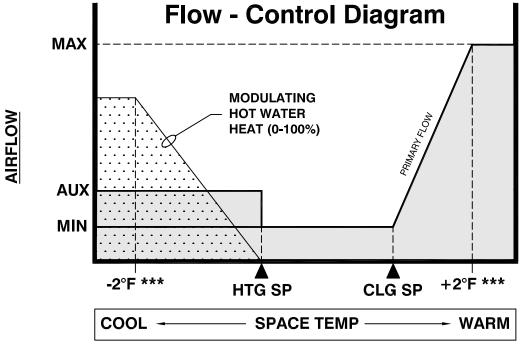
DATE:



SD - A - 5203

- SINGLE DUCT
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- AIR FLOW SETPOINTS ADJUSTED AT THERMOSTAT



*** PROPORTIONAL BAND (**PROP BD**) DEFAULT AT $2^{\circ}F$, ADJUSTABLE FROM 1 to $10^{\circ}F$ IN "ADVANCE" MENU ON THERMOSTAT

SEQUENCE OF OPERATION

- 1. THE THERMOSTAT SIGNALS THE CONTROLLER IN RESPONSE TO THE SPACE TEMPERATURE, WITH BOTH COOLING AND HEATING SETPOINT INCLUDED.
- 2. THE DAMPER MAINTAINS MINIMUM FLOW WHEN THE SPACE TEMPERATURE IS BETWEEN THE HEATING AND COOLING SETPOINT. AS THE SPACE TEMPERATURE INCREASES FROM THE COOLING SETPOINT TO 2°F ABOVE THE COOLING SETPOINT, THE DAMPER OPENS FROM MINIMUM AIRFLOW TO MAXIMUM AIRFLOW. THE DAMPER MAINTAINS MAXIMUM FLOW AT OVER 2°F ABOVE COOLING SETPOINT.
- 3. WHEN THE SPACE TEMPERATURE DROPS BELOW THE HEATING SETPOINT, THE AIRFLOW RATE IS INDEXED TO THE AUX AIRFLOW SETPOINT, AND MODULATING HOT WATER HEAT IS GRADUALLY ADDED TO THE SPACE (FROM 0 TO 100%) AS THE SPACE TEMPERATURE DROPS FROM THE HEATING SETPOINT DOWN TO 2°F BELOW THE HEATING SETPOINT.
- 4. AUX FLOW FUNCTIONS TO INCREASE AIR FLOW DURING HEATING, WHICH REDUCES THE DISCHARGE TEMP FOR IMPROVED THERMAL COMFORT.
- 5. MAXIMUM (AO1 MAX), MINIMUM (AO1 MIN), AND AUX AIRFLOW (AO1 AUX) ARE CONFIGURABLE IN "LIMITS" MENU ON THERMOSTAT.
- 6. LIMITS OF OUTPUT SIGNAL FOR CONTROLLING HOT WATER VALVE (AO2 MAX & AO2 MIN) ARE CONFIGURABLE FROM 0 TO 12 VDC IN "LIMITS" MENU ON THERMOSTAT.
- 7. UPON LOSS OF POWER, DAMPER FAILS IN PLACE.

 JOB NAME:
 DWG #: SD-A-5203.2

 SUBMITTED BY:
 REV:

 DATE:
 4-26-13