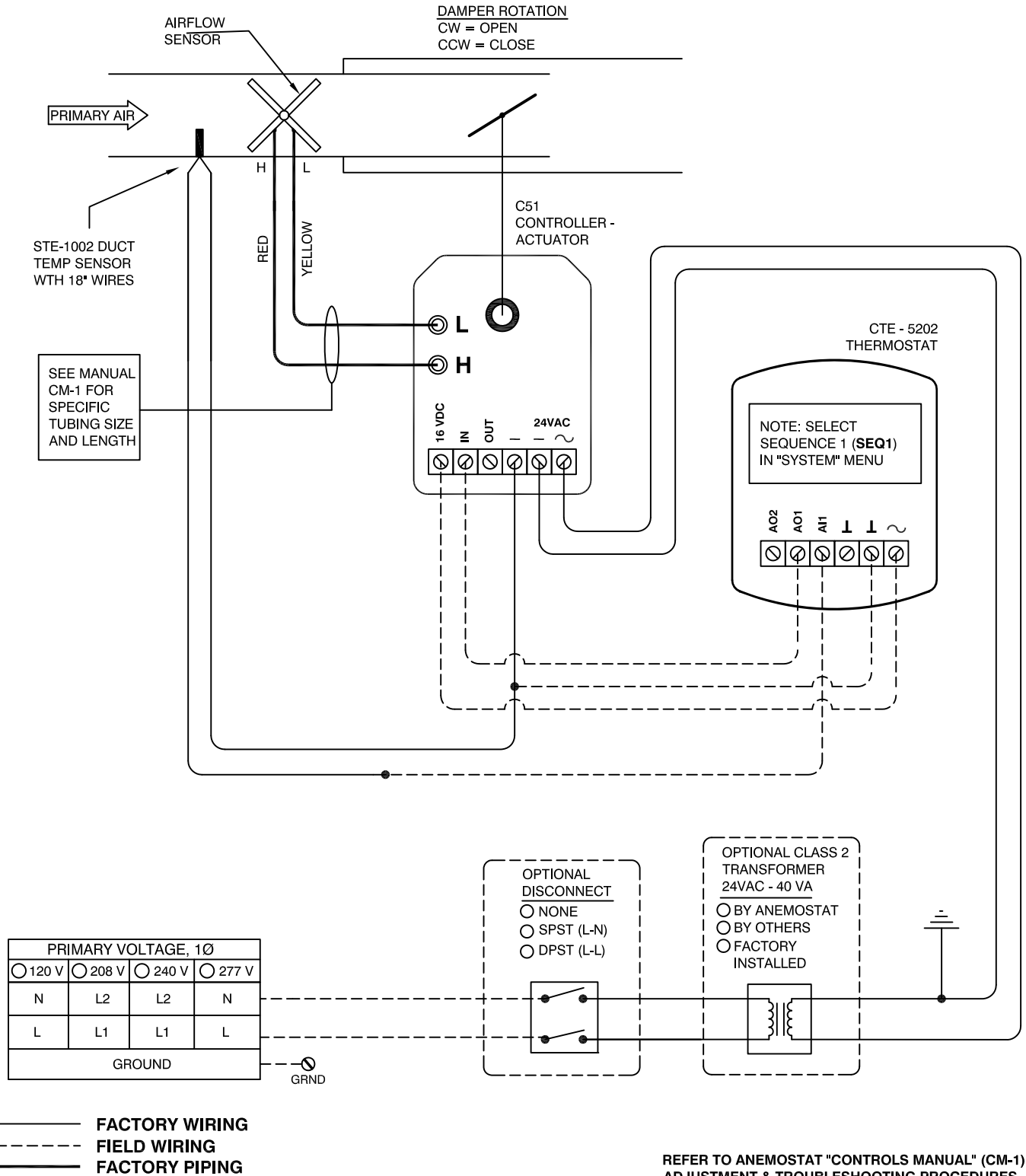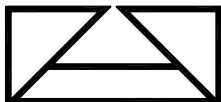# ANEMOSTAT®
AIR TERMINAL CONTROLS

Control Package
SD - A - 5240

- SINGLE DUCT
- ANALOG ELECTRONIC CONTROLS
- VAV HEATING & COOLING
- AUTOMATIC CHANGEOVER
- PRESSURE INDEPENDENT
- AIR FLOW SETPOINTS ADJUSTED AT THERMOSTAT

AIRFLOW SENSOR

DAMPER ROTATION
CW = OPEN
CCW = CLOSE

PRIMARY AIR

H   L

RED   YELLOW

STE-1002 DUCT
TEMP SENSOR
WTH 18" WIRES

C51
CONTROLLER -
ACTUATOR

SEE MANUAL
CM-1 FOR
SPECIFIC
TUBING SIZE
AND LENGTH

L

H

16 VDC   IN   OUT   24VAC
—   ~

CTE - 5202
THERMOSTAT

NOTE: SELECT
SEQUENCE 1 (**SEQ1**)
IN "SYSTEM" MENU

AO2 AO1 AI1 ⊥ ⊥ ~

OPTIONAL
DISCONNECT
○ NONE
○ SPST (L-N)
○ DPST (L-L)

OPTIONAL CLASS 2
TRANSFORMER
24VAC - 40 VA
○ BY ANEMOSTAT
○ BY OTHERS
○ FACTORY
   INSTALLED

PRIMARY VOLTAGE, 1Ø			
○ 120 V	○ 208 V	○ 240 V	○ 277 V
N	L2	L2	N
L	L1	L1	L
GROUND			

GRND

——— FACTORY WIRING
- - - - FIELD WIRING
▬▬▬ FACTORY PIPING

REFER TO ANEMOSTAT "CONTROLS MANUAL" (CM-1) FOR
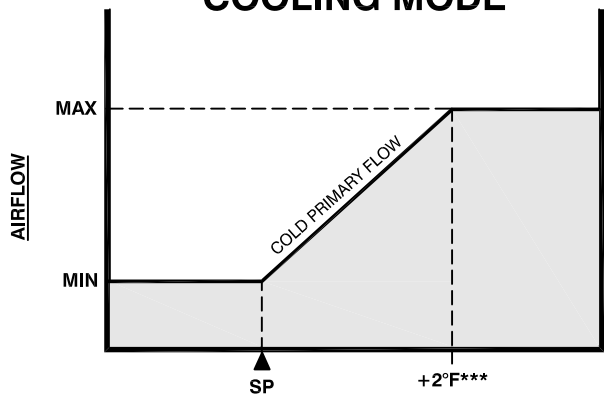ADJUSTMENT & TROUBLESHOOTING PROCEDURES.

JOB NAME:
SUBMITTED BY:
DATE:

DWG #: SD-A-5240.1
REV: D
DATE: 3-2-2017

- SINGLE DUCT
- ANALOG ELECTRONIC CONTROLS
- VAV HEATING & COOLING
- AUTOMATIC CHANGEOVER
- PRESSURE INDEPENDENT
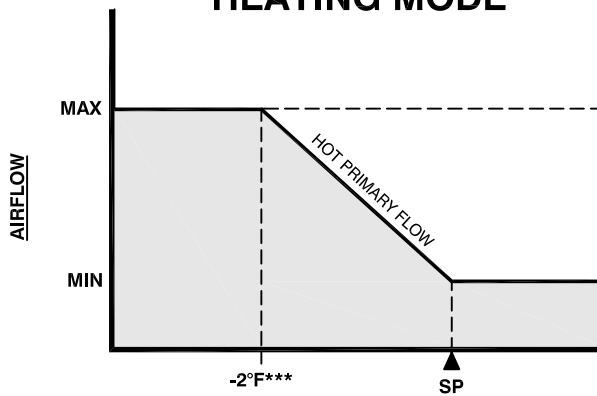- AIR FLOW SETPOINTS ADJUSTED AT THERMOSTAT

COOLING MODE

*** PROPORTIONAL BAND (**PROP BD**) DEFAULT AT 2°F, ADJUSTABLE FROM 1 to 10°F IN "ADVANCE" MENU ON THERMOSTAT

HEATING MODE

*** PROPORTIONAL BAND (**PROP BD**) DEFAULT AT 2°F, ADJUSTABLE FROM 1 to 10°F IN "ADVANCE" MENU ON THERMOSTAT

SEQUENCE OF OPERATION

THE THERMOSTAT SIGNALS THE CONTROLLER IN RESPONSE TO THE SPACE TEMPERATURE. THE CONTROLS SENSE SUPPLY AIR TEMP AND AUTOMATICALLY INDEX TO D.A. COOLING OR R.A. HEATING.

COOLING MODE

1. WHEN SUPPLY AIR TEMP IS LESS THAN 77°F, THE THERMOSTAT D.A. COOLING OUTPUT CONTROLS FLOW (COOLING MODE). WITH SPACE TEMPERATURE BELOW THE THERMOSTAT SETPOINT, THE DAMPER MAINTAINS MINIMUM COLD AIRFLOW.

2. AS THE SPACE TEMPERATURE INCREASES FROM SETPOINT TO 2°F ABOVE SETPOINT, THE DAMPER OPENS FROM MINIMUM AIRFLOW TO MAXIMUM AIRFLOW. AT OVER 2°F ABOVE SETPOINT, THE DAMPER MAINTAINS MAXIMUM COLD FLOW.

HEATING MODE

1. WHEN SUPPLY AIR TEMP IS GREATER THAN 77°F, THE THERMOSTAT R.A. HEATING OUTPUT CONTROLS FLOW (HEATING MODE).

WITH SPACE TEMPERATURE ABOVE THE THERMOSTAT SETPOINT, THE DAMPER MAINTAINS MINIMUM HOT AIRFLOW.

2. AS THE SPACE TEMPERATURE DECREASES FROM HEATING SETPOINT TO 2°F BELOW THE SETPOINT, THE DAMPER OPENS FROM MINIMUM AIRFLOW TO MAXIMUM AIRFLOW. AT OVER 2°F BELOW THE SETPOINT, THE DAMPER MAINTAINS MAXIMUM HOT FLOW.

SETPOINT SETTINGS

1. ADJUST THE MINIMUM (**AO1 MIN**) OR MAXIMUM (**AO1 MAX**) AIRFLOW SETPOINT IN "LIMITS" MENU ON THERMOSTAT.

2. ADJUST CHANGEOVER (**CNG OVR**) TEMPERATURE (DEFAULT AT 77° F, CONFIGURABLE FROM 55 TO 85° F) IN "ADVANCE" MENU ON THERMOSTAT.

3. UPON LOSS OF POWER, DAMPER FAILS IN PLACE.

4. A MINIMUM OF GREATER THAN ZERO IS REQUIRED FOR CHANGEOVER.

JOB NAME:	DWG #: SD-A-5240.2
SUBMITTED BY:	REV: A
DATE:	DATE: 5-31-13