



BAC-120063CW-ZEC FlexStat™ Zoning Equipment Controller

SIMPLY VAV

Description and Application

This model of FlexStat provides an easy, flexible solution for controlling unitary equipment and up to 16 associated Variable Air Volume (VAV) zones. Controlled equipment types include packaged Roof Top Units (RTUs), Heat Pump Units (HPUs), commercial split systems, and other similar unitary equipment. It is a powerful but simple solution for either retrofitting older VVT-type systems or installing new light-commercial zoning systems.

The BAC-120063CW-ZEC automatically switches between heating and cooling control based on local zone demands. It automatically discovers and communicates with up to 16 associated **SimplyVAV** controllers via the integral BACnet MS/TP network to provide integration of the entire system. The SimplyVAV controllers, along with SSS-1000 series flow sensors, provide pressure-independent VAV control in their respective zones. (See [Sample Installation on page 3.](#))

The BAC-120063CW-ZEC can also provide a static pressure setpoint signal to an optional **CSP-4702** pressure controller used with the system for pressure bypass control.

With no software required, the BAC-120063CW-ZEC is quick and user-friendly to install and configure. Yet it also communicates with any Building Automation System using a BACnet network for monitoring and additional control options.

It comes preconfigured for a 2H/2C RTU and zone device number range of 1000001 through 1000016, and if this describes your equipment, the occupancy schedule is the only required configuration needed after mounting and wiring. Scheduling is easily set up in the BAC-120063CW-ZEC's on-screen menu system.



Features

Interface and Function

- ◆ Built-in, factory-tested zoning application control sequence and trend logs
- ◆ Schedules can easily be set uniquely by the entire week (Mon.–Sun.), weekdays (Mon.–Fri.), weekend (Sat.–Sun.), individual days, and/or holidays; six On/Off periods with independent heating and cooling setpoint are available per scheduled day
- ◆ User-friendly English-language menus (no obscure numeric codes) on a 64 x 128 pixel, dot-matrix LCD display with 5 buttons for data selection and entry
- ◆ Multiple display options include degrees Fahrenheit/Celsius DAT temperature selection
- ◆ Three levels of password-protected access (user/operator/administrator) prevent disruption of operation and configuration
- ◆ A 72-hour power (capacitor) backup and a real time clock for network time synchronization or full stand alone operation

Inputs

- ◆ Analog inputs for DAT and static pressure feedback
- ◆ Input overvoltage protection (24 VAC, continuous)
- ◆ 12-bit analog-to-digital conversion on inputs

Outputs

- ◆ Analog outputs for optional static pressure setpoint, optional heating/cooling coil valve, and optional outside air damper (see the [BAC-120063CW-ZEC Installation and Configuration Guide](#) for details)
- ◆ Six binary outputs (relays) for equipment control
- ◆ The NO, SPST (Form “A”) relays are rated for 1 A max. per relay or 1.5 A per bank of 3 relays (relays 1–3 and 4–6) @ 24 VAC/VDC

Installation

- ◆ Backplate mounts on a standard vertical 2 x 4 inch wall handy-box (or, with an HMO-10000W adapter, a horizontal or 4 x 4 handy-box), and the cover is secured to the backplate by two concealed hex screws
- ◆ Two-piece design allows field rough-in and termination of field wiring to the backplate without needing the FlexStat at the site—permitting FlexStats to be bulk-configured off-site and plugged into the wired backplates at a later time if desired (see [Dimensions and Connectors on page 2](#))

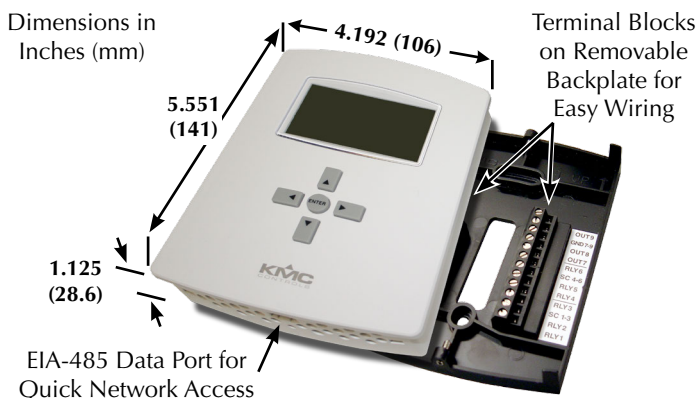
Connections

- ◆ Screw terminal blocks, wire size 14–22 AWG, for inputs, outputs, power, and MS/TP network
- ◆ A four-pin EIA-485 data port on the underside of the case enables easy temporary computer connection to the BACnet network (access with a KMD-5624 cable—requires use of KMD-5576 or third-party interface)

BACnet Communication and Standards

- ◆ Integral peer-to-peer BACnet MS/TP LAN network communications on all models (with configurable baud rate from 9600 to 76.8K baud)
- ◆ Meets or exceeds BACnet AAC specifications in the ANSI/ASHRAE BACnet Standard 135-2008

Dimensions and Connectors

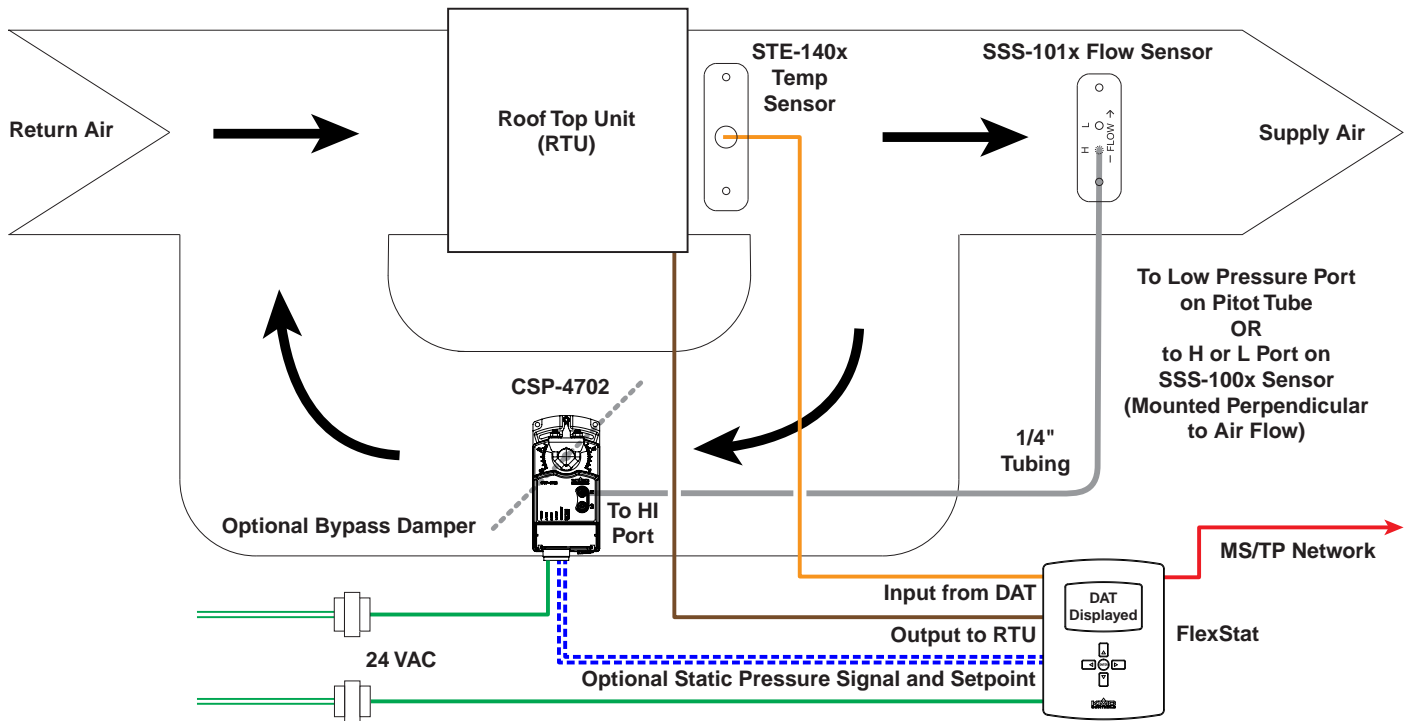


Specifications

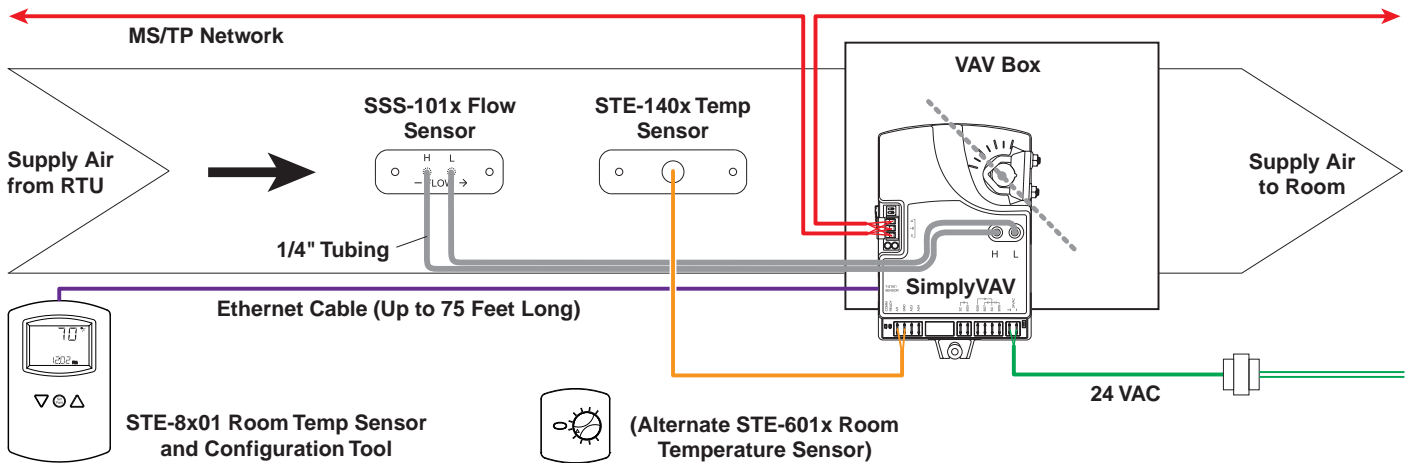
Supply Voltage	24 VAC (+20%/–10%), Class 2 only
Supply Power	13 VA (not including relays)
Outputs	Binary outputs (NO, SPST, Form “A” relays) carry 1 A max. per relay or a total of 1.5 A per bank of 3 relays (relays 1–3 and 4–6) @ 24 VAC/VDC Analog outputs produce 0–12 VDC, 20 mA maximum
External Inputs (6)	Analog 0–12 VDC (active, passive contacts, 10K thermistors)
Connections	Wire clamp type terminal blocks; 14–22 AWG, copper Four-pin EIA-485
Display	64 x 128 pixel dot matrix LCD
Case Material	White flame-retardant plastic
Dimensions	5.551 x 4.192 x 1.125 inches (141 x 106 x 28.6 mm)
Weight	0.48 lbs. (0.22 kg)
Warranty	5 years (from mfg. date code)
Environmental Limits	
Operating	34 to 125° F (1.1 to 51.6° C)
Shipping	–22 to 140° F (–30 to 60° C)
Humidity	0 to 95% RH (non-condensing)
Approvals	
UL	UL 916 Energy Management Equipment listed
BTL	BACnet Testing Laboratory listed as Advanced Application Controller (B-AAC)
FCC	FCC Class A, Part 15, Subpart B and complies with Canadian ICES-003 Class A**

**This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Sample Installation



RTU (with Optional Bypass) Control



Typical VAV Zone (1 of up to 16)

NOTE: For more information about applications, mounting, wiring, configuration, and operation, see the [BAC-120063CW-ZEC FlexStat Installation Guide](#). (See also [Accessories on page 4](#).)

NOTE: See also complete information about the analog [CSP-4702](#) VAV/bypass controller-actuator and digital [SimplyVAV BAC-8001/8005/8205](#) VAV controller-actuators.

Accessories

Bypass Control (Optional)

CSP-4702	Analog differential-pressure VAV controller/actuator
SSS-101x	Static pressure sensor

DAT (Discharge Air Temperature) Sensor

STE-140x	Duct temperature sensor with rigid probe
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Mounting Hardware

HMO-10000W	Horizontal or 4 x 4 handy box wall mounting plate
HPO-1602	Replacement backplate
SP-001	Screwdriver (KMC branded) with flat blade (for terminals) and hex end (for cover screws)

Network Communications and Firmware

HTO-1103	FlexStat firmware upgrade kit
KMD-5567	Network surge suppressor
KMD-5575	Network repeater/isolator
KMD-5576	EIA-485 to USB Communicator
KMD-5624	PC data port (EIA-485) cable (FlexStat to USB Communicator)—included with the KMD-5576 (buy for third-party EIA-232 interfaces)

Transformer, 24 VAC

XEE-6111-050	120 to 24 VAC, 50 VA, single-hub
XEE-6112-050	120 to 24 VAC 50 VA, dual-hub
XEE-6311-050	120/240/277/480 to 24 VAC 50 VA, dual-hub

VAV Control (on Network)

SimplyVAV	BAC-8001/8005/8205 VAV controller/actuator
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NOTE: For details, see the respective product data sheets and installation guides. See also the [FlexStat Catalog Supplement and Selection Guide](#).

Awards and Support

The FlexStat line won these awards:

- ◆ Gold medal in the Networked/BAS category of *Consulting-Specifying Engineer* magazine's Product of the Year competition (September 2010)
- ◆ Editors' Choice product in *Commercial Building Products* (October 2010)
- ◆ Winner in the HVAC & Plumbing category of *Green Thinker Network's Sustainability 2012* competition (April 2012)
- ◆ FlexStat support documents also won an Award of Merit in the 2009–2010 publications competition sponsored by the Chicago Chapter of the Society for Technical Communication (April 2010) The **FlexStat Catalog Supplement and Selection Guide** was one of five **KMC catalogs and supplements** that, as a collection, won two awards from the Society for Technical Communication in 2013.

FlexStats come with a printed Installation Guide. Additional award-winning resources for configuration, application, operation, programming, upgrading and much more are available on the KMC Controls web site (www.kmcccontrols.com). To see all available files, log-in to the [KMC Partners site](#).



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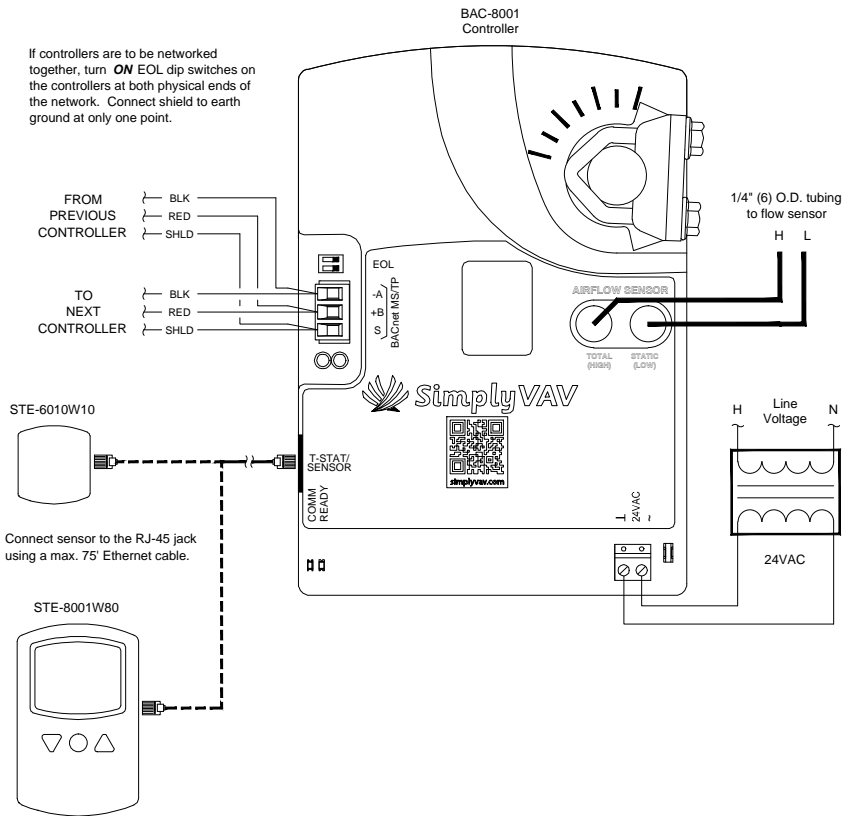
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**Single Duct Variable Air Volume (VAV) Terminal Unit
Cooling Only
Pressure Independent
Model: BAC-8001**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.

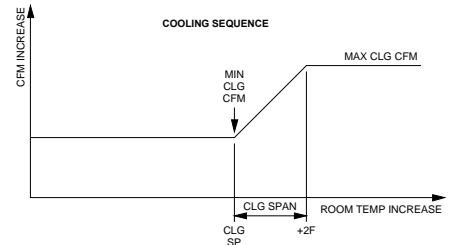


NOTES:

1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.

SEQUENCE OF OPERATION:

1. As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. Below cooling setpoint, minimum cooling airflow is maintained.



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DRAWING TITLE: COOLING ONLY VAV

CREATION DATE: 3/7/2014

FILENAME: SS14001A_SimplyVAV_CLG

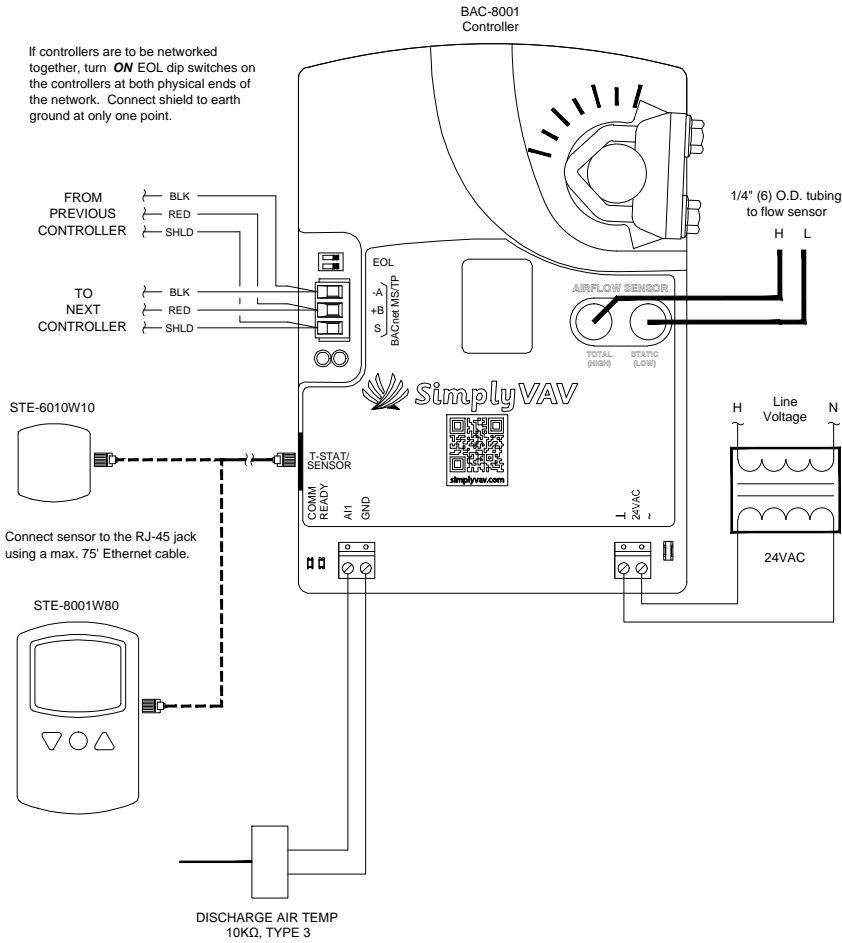
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



Single Duct Variable Air Volume (VAV) Terminal Unit
Cooling/Heating with Changeover
Pressure Independent
Model: BAC-8001

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.



External connections:

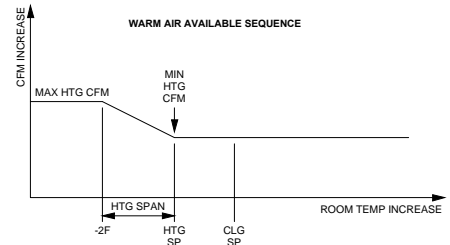
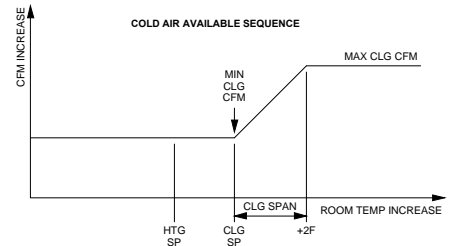
A11 = DAT SENSOR

NOTES:

1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.

SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. Below cooling setpoint, minimum cooling airflow is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.



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DRAWING TITLE: COOLING/HEATING VAV

CREATION DATE: 3/7/2014

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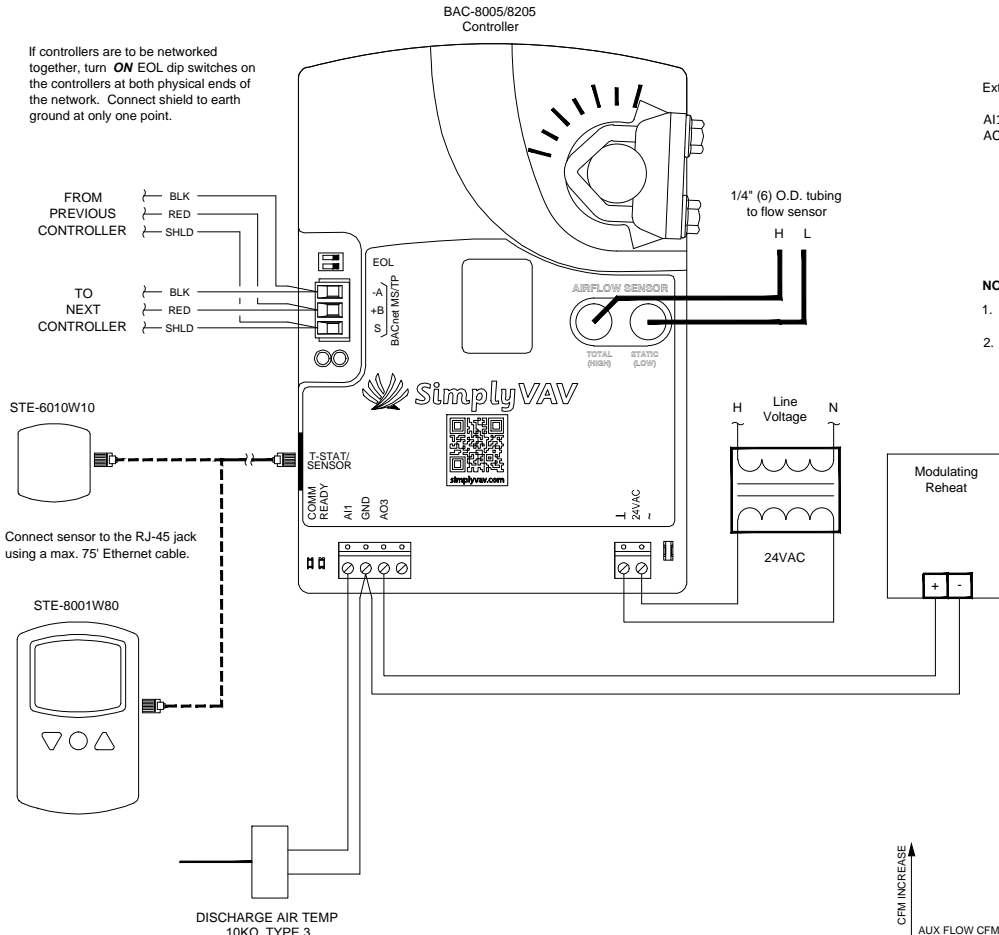
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



**Single Duct Variable Air Volume (VAV) Terminal Unit
Cooling with Modulating Reheat
Pressure Independent
Model: BAC-8005/8205**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.

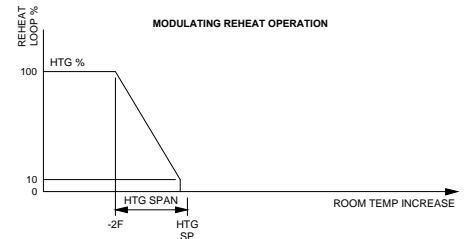
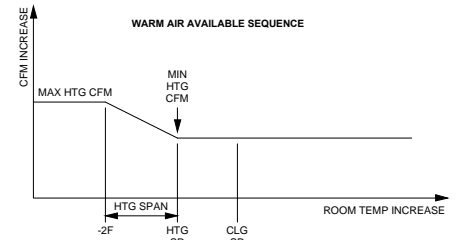
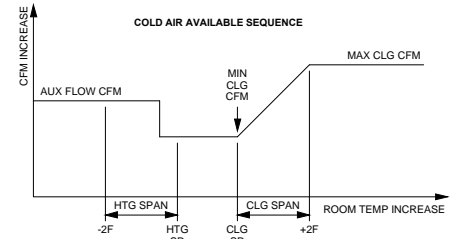


External connections:
A11 = DAT SENSOR
AO3 = MOD REHEAT

- NOTES:**
1. Controller settings must be initially set using an STE-8XXX.
 2. See SimplyVAV.com for accessories and additional details.

SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. As the space temp drops below the heating setpoint, the heating output modulates open. As the space temp rises toward the heating setpoint, the heating output modulates closed. If the heating loop is less than 10%, the heating output remains at zero percent.
5. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.



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DRAWING TITLE: COOLING VAV W/MODULATING REHEAT

CREATION DATE: 3/7/2014

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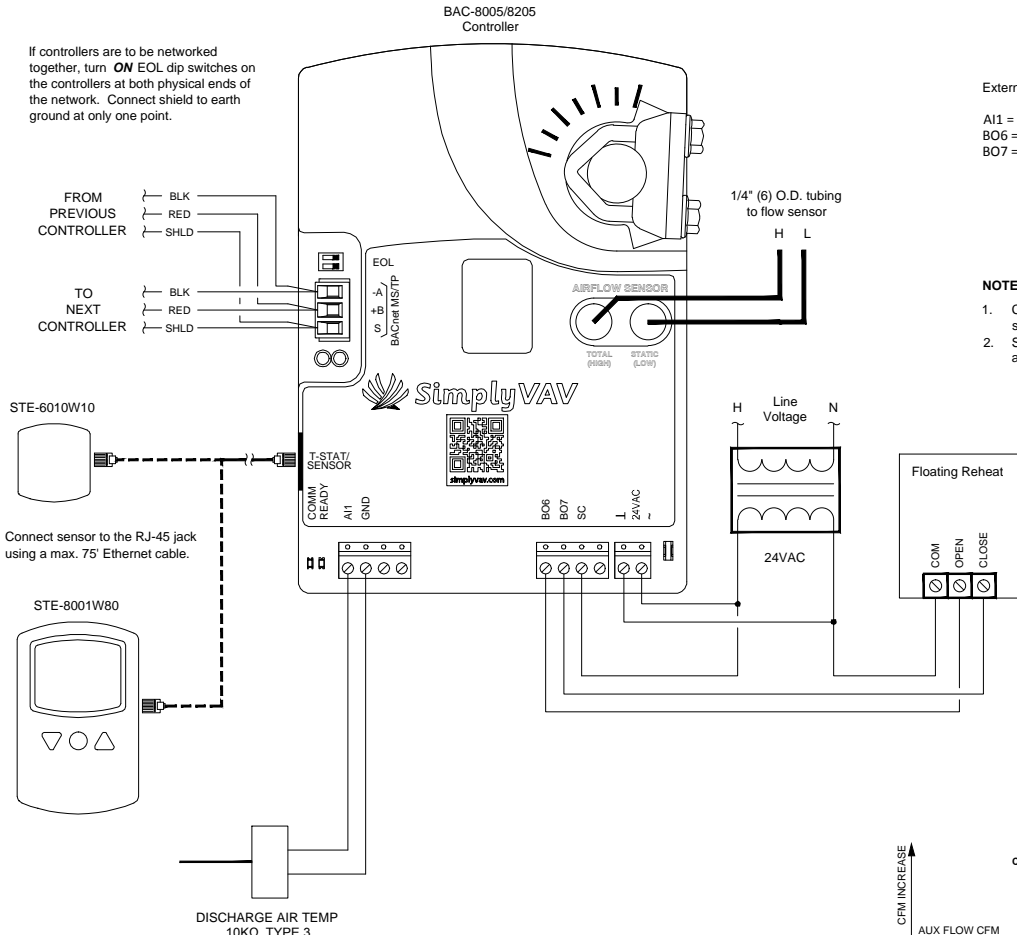
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



Single Duct Variable Air Volume (VAV) Terminal Unit
Cooling with Floating Reheat
Pressure Independent
Model: BAC-8005/8205

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.

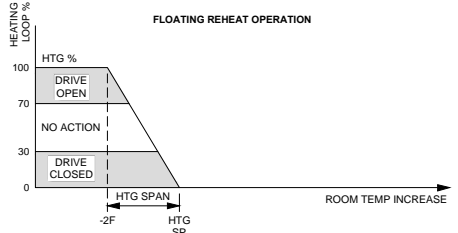
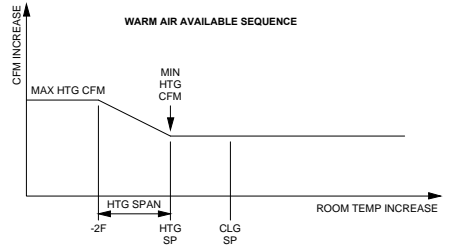
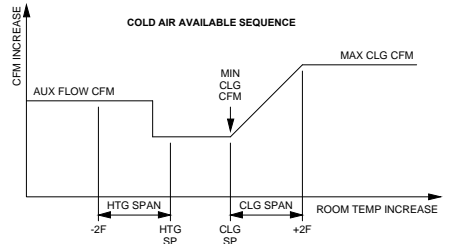


External connections:
 A11 = DAT SENSOR
 B06 = OPEN VALVE
 B07 = CLOSE VALVE

- NOTES:**
1. Controller settings must be initially set using an STE-8XXX.
 2. See SimplyVAV.com for accessories and additional details.

SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. As the space temp drops below the heating setpoint (heating loop is greater than 70%), the valve is driven open. As the space temp rises back toward the heating setpoint (heating loop is less than 30%), the valve is driven closed. If the loop is in between, there is no valve action.
5. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.



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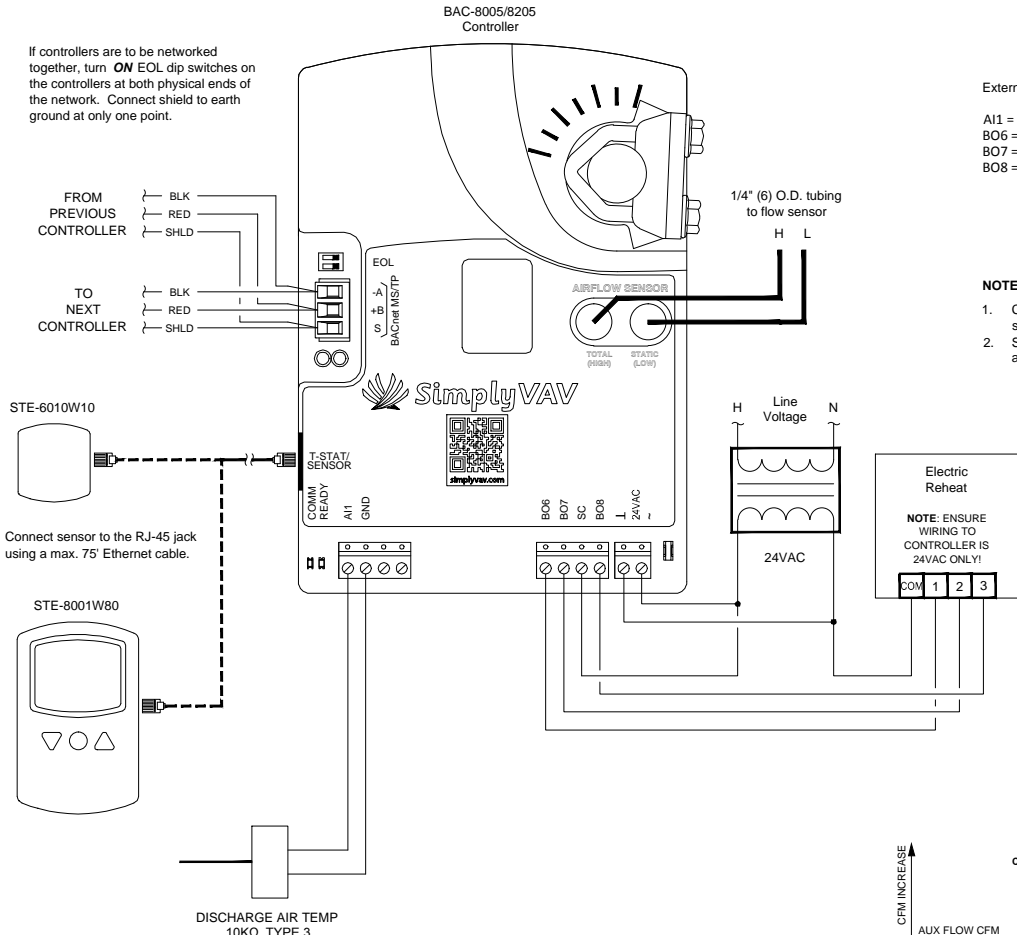
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 SimplyVAV.com

DRAWING TITLE: COOLING VAV W/FLOATING REHEAT	
CREATION DATE: 3/7/2014	FILENAME: SS14004A_SimplyVAV_CLG_FLOAT_RHT
REVISION DATE: 3/7/2014	REVISION: INITIAL RELEASE



Single Duct Variable Air Volume (VAV) Terminal Unit
Cooling with Staged Electric Reheat
Pressure Independent
Model: BAC-8005/8205

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.

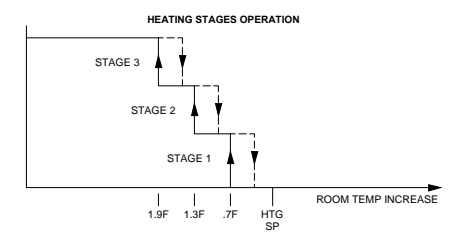
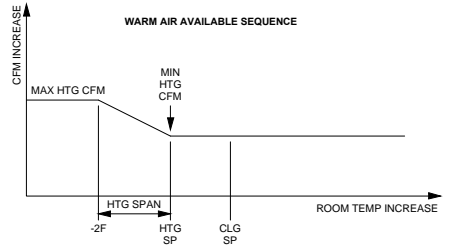
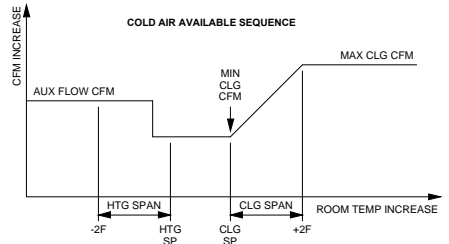


External connections:
 A11 = DAT SENSOR
 B06 = REHEAT #1
 B07 = REHEAT #2
 B08 = REHEAT #3

NOTES:
 1. Controller settings must be initially set using an STE-8XXX.
 2. See SimplyVAV.com for accessories and additional details.

SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. As the space temp drops below the heating setpoint, stages 1, 2 and 3 of electric reheat are energized respectively. As the space temp rises back toward the heating setpoint, heating stages 3, 2 and 1 turn off respectively.
5. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.



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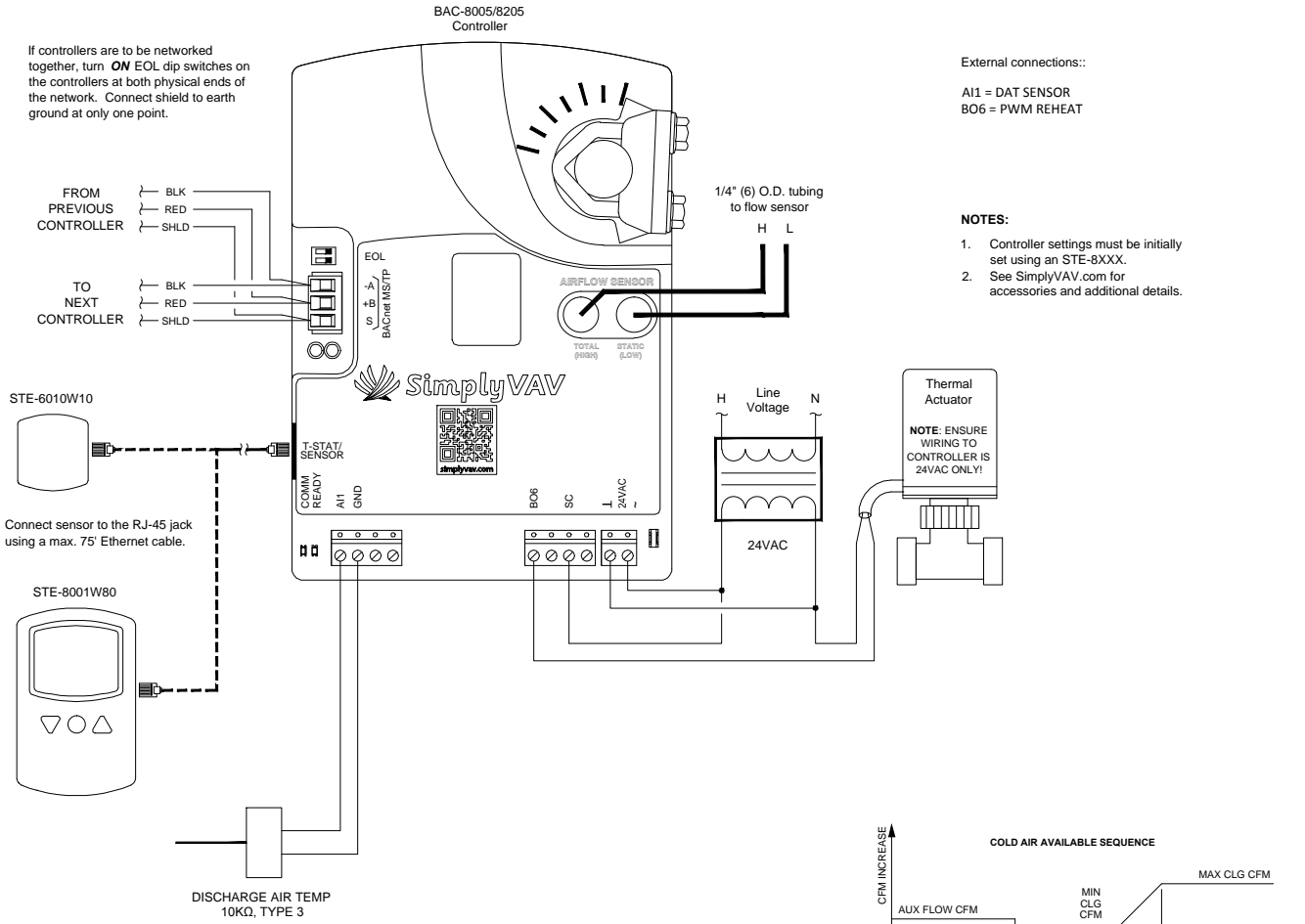
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DRAWING TITLE: COOLING VAV W/STAGED REHEAT	
CREATION DATE: 3/7/2014	FILENAME: SS14005A_SimplyVAV_CLG_3STAGE_RHT
REVISION DATE: 3/7/2014	REVISION: INITIAL RELEASE



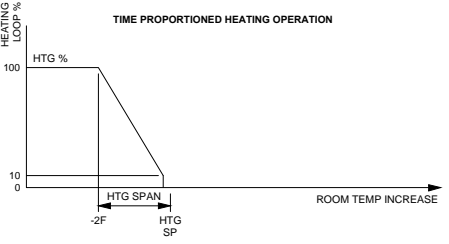
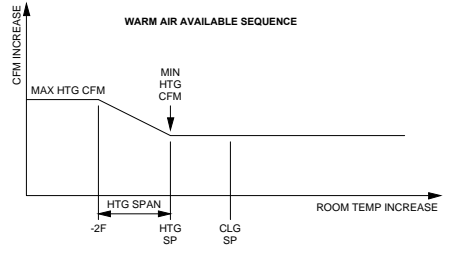
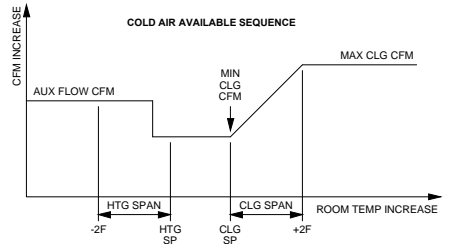
**Single Duct Variable Air Volume (VAV) Terminal Unit
Cooling with Time-Proportioned Reheat (PWM)
Pressure Independent
Model: BAC-8005/8205**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.



External connections:
A11 = DAT SENSOR
BO6 = PWM REHEAT

- NOTES:**
1. Controller settings must be initially set using an STE-8XXX.
 2. See SimplyVAV.com for accessories and additional details.



SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. As the space temp drops below the heating setpoint, the heating output is controlled in a 10 second based, time-proportioned manner. If the heating loop is less than 10%, the heating output remains at zero percent.
5. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.

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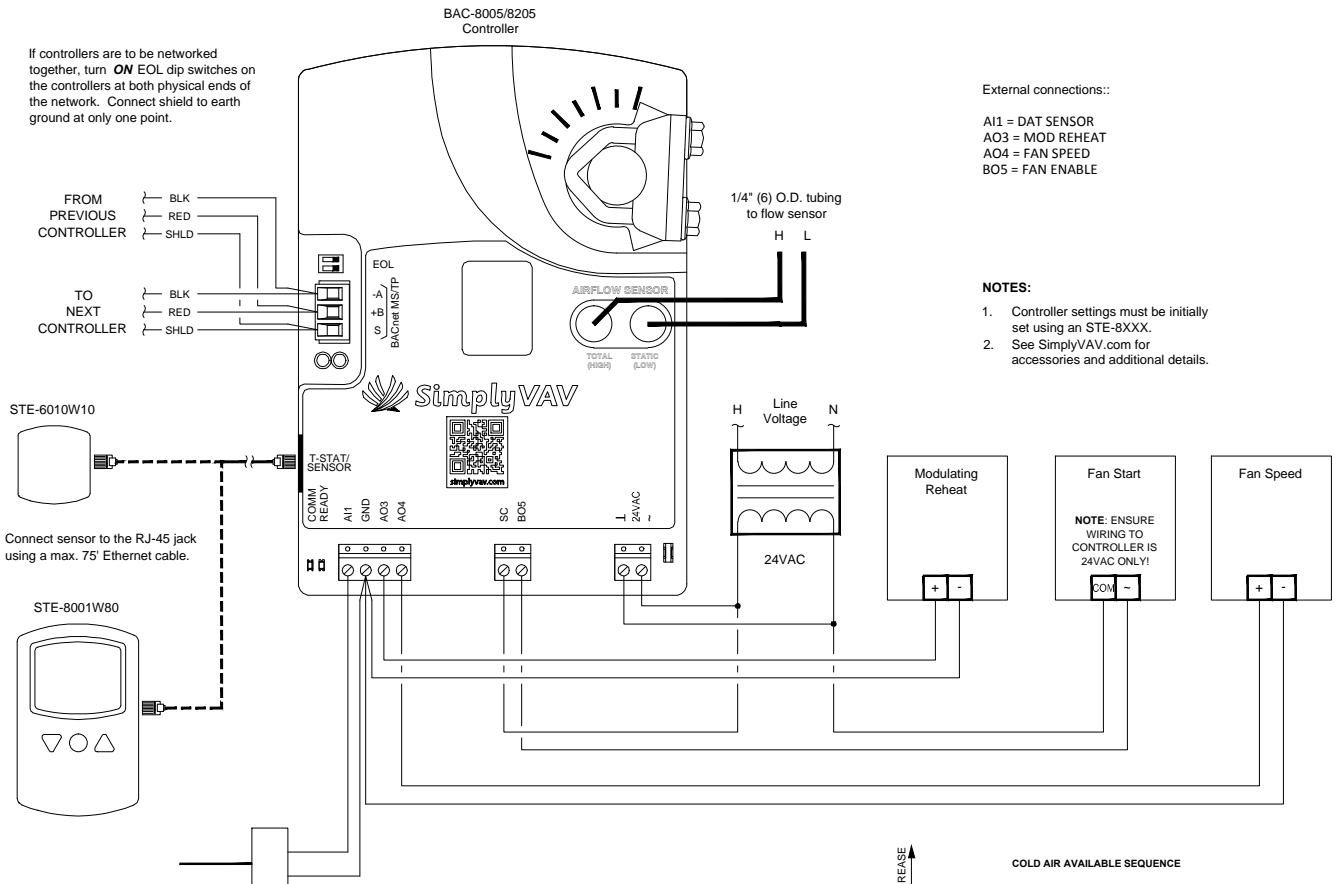
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DRAWING TITLE: COOLING VAV W/PWM REHEAT	
CREATION DATE: 3/7/2014	FILENAME: SS14006A_SimplyVAV_CLG_PWM_RHT
REVISION DATE: 3/7/2014	REVISION: INITIAL RELEASE



**Single Duct Variable Air Volume (VAV) Terminal Unit
Series Fan Powered with Modulating Reheat
Pressure Independent
Model: BAC-8005/8205**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.

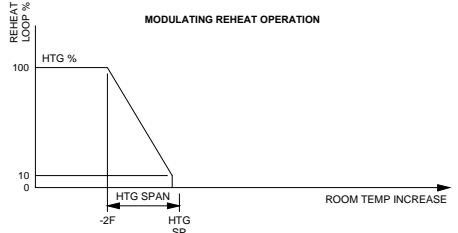
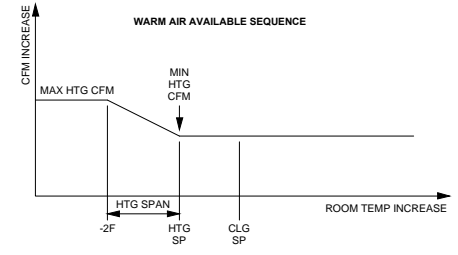
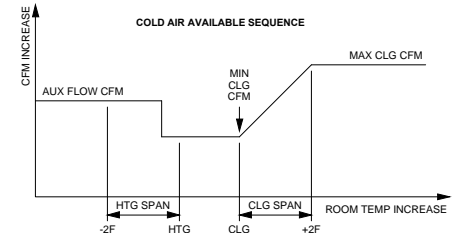
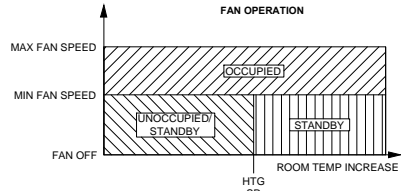


External connections:

- A1 = DAT SENSOR
- AO3 = MOD REHEAT
- AO4 = FAN SPEED
- BO5 = FAN ENABLE

NOTES:

1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.



SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. The fan is started during occupied and standby modes. During unoccupied mode, the fan starts on a call for heating only. The fan stops only during unoccupied mode when there is no call for heat. During occupied mode, the fan runs at maximum fan speed. During standby and unoccupied modes, the fan runs at minimum fan speed.
5. As the space temp drops below the heating setpoint, the heating output modulates open. As the space temp rises toward the heating setpoint, the heating output modulates closed. If the heating loop is less than 10%, the heating output remains at zero percent.
6. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.

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DRAWING TITLE: SERIES FPB W/MODULATING REHEAT

CREATION DATE: 3/7/2014

FILENAME: SS14007A_SimplyVAV_SER_FAN_MOD_RHT

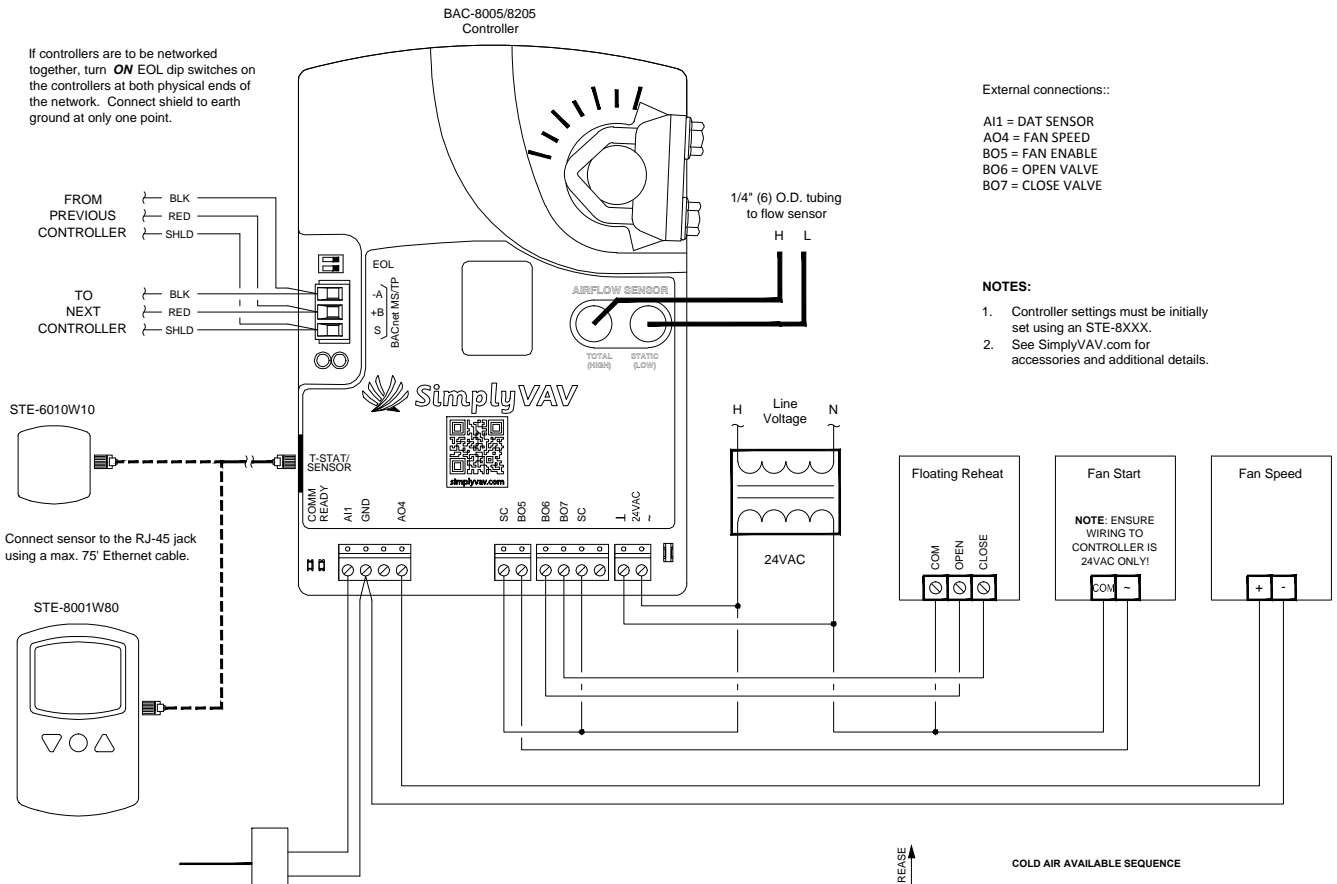
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



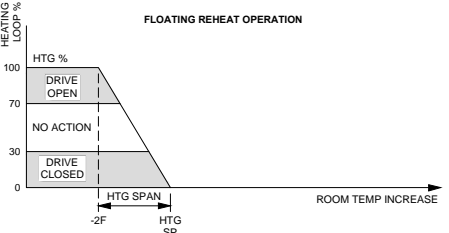
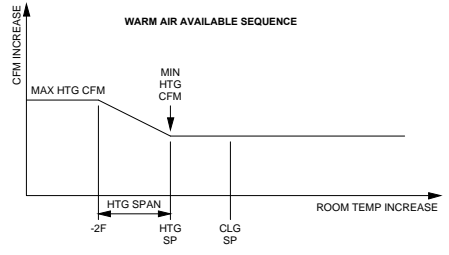
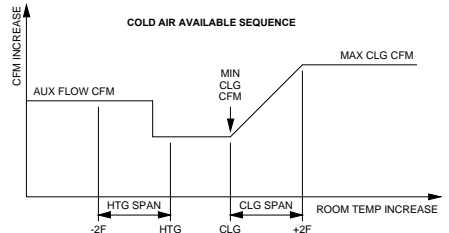
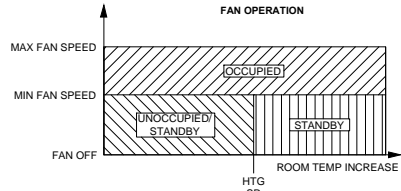
Single Duct Variable Air Volume (VAV) Terminal Unit
Series Fan Powered with Floating Reheat
Pressure Independent
Model: BAC-8005/8205

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.



External connections:
 A1 = DAT SENSOR
 AO4 = FAN SPEED
 BO5 = FAN ENABLE
 BO6 = OPEN VALVE
 BO7 = CLOSE VALVE

NOTES:
 1. Controller settings must be initially set using an STE-8XXX.
 2. See SimplyVAV.com for accessories and additional details.



SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. The fan is started during occupied and standby modes. During unoccupied mode, the fan starts on a call for heating only. The fan stops only during unoccupied mode when there is no call for heat. During occupied mode, the fan runs at maximum fan speed. During standby and unoccupied modes, the fan runs at minimum fan speed.
5. As the space temp drops below the heating setpoint (heating loop is greater than 70%), the valve is driven open. As the space temp rises back toward the heating setpoint (heating loop is less than 30%), the valve is driven closed. If the loop is in between, there is no valve action.
6. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.

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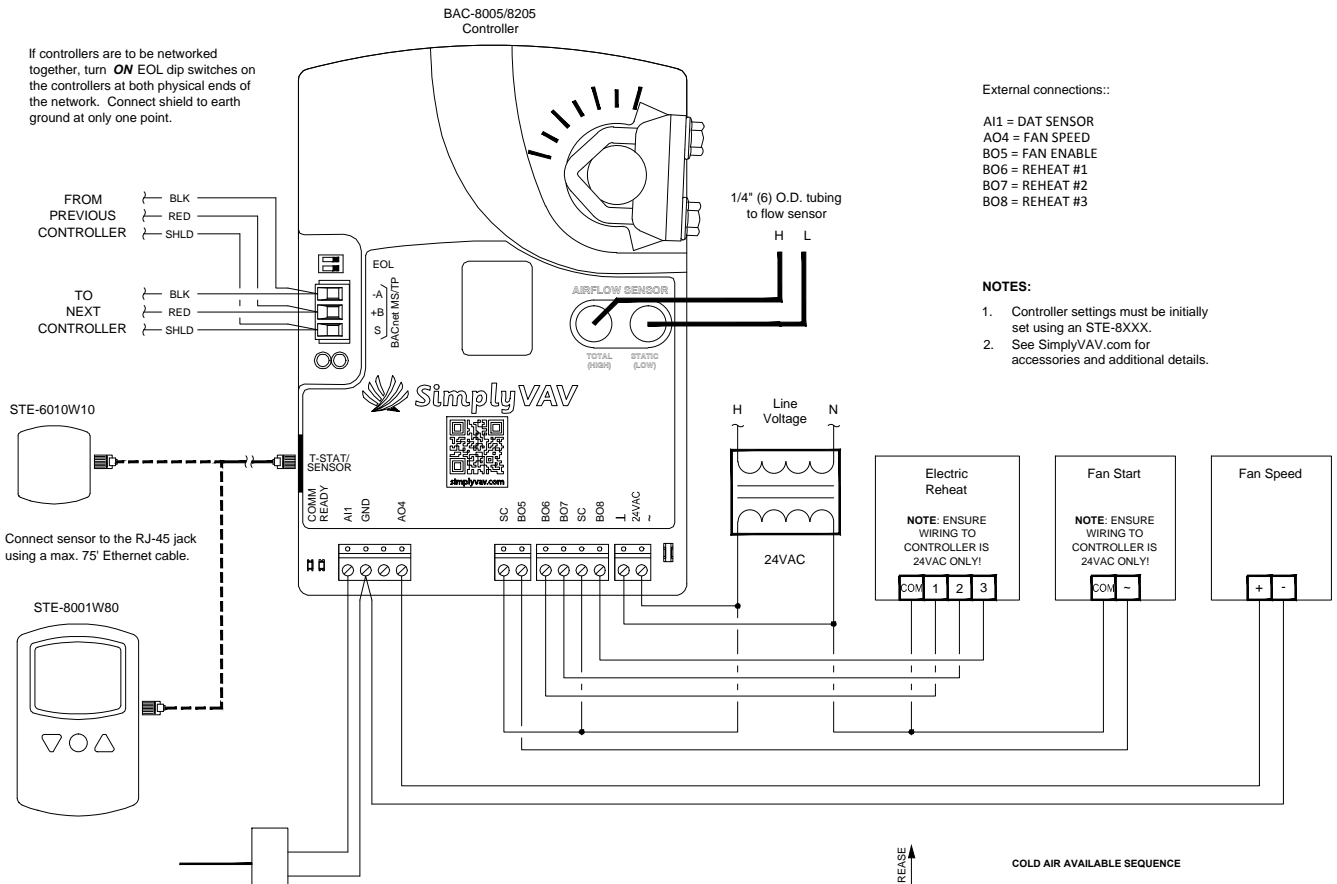
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 SimplyVAV.com

DRAWING TITLE: SERIES FPB W/FLOATING REHEAT	
CREATION DATE: 3/7/2014	FILENAME: SS14008A_SimplyVAV_SER_FAN_FLOAT_RHT
REVISION DATE: 3/7/2014	REVISION: INITIAL RELEASE



**Single Duct Variable Air Volume (VAV) Terminal Unit
Series Fan Powered with Staged Electric Reheat
Pressure Independent
Model: BAC-8005/8205**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.



External connections::

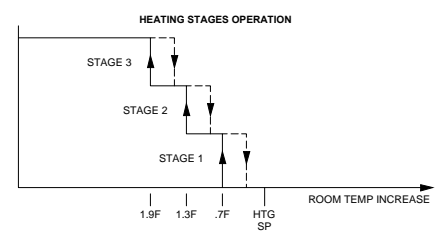
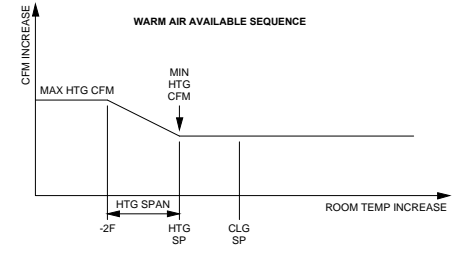
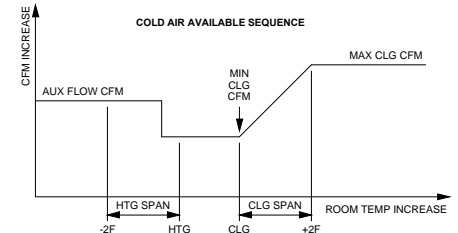
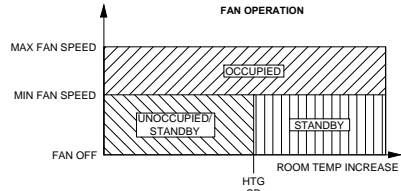
- A1 = DAT SENSOR
- AO4 = FAN SPEED
- BO5 = FAN ENABLE
- BO6 = REHEAT #1
- BO7 = REHEAT #2
- BO8 = REHEAT #3

NOTES:

1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.

SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. The fan is started during occupied and standby modes. During unoccupied mode, the fan starts on a call for heating only. The fan stops only during unoccupied mode when there is no call for heat. During occupied mode, the fan runs at maximum fan speed. During standby and unoccupied modes, the fan runs at minimum fan speed.
5. As the space temp drops below the heating setpoint, stages 1, 2 and 3 of electric reheat are energized respectively. As the space temp rises back toward the heating setpoint, heating stages 3, 2 and 1 turn off respectively.
6. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.



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DRAWING TITLE: SERIES FPB W/STAGED REHEAT

CREATION DATE: 3/7/2014

FILENAME: SS14009A_SimplyVAV_SER_FAN_3STAGE_RHT

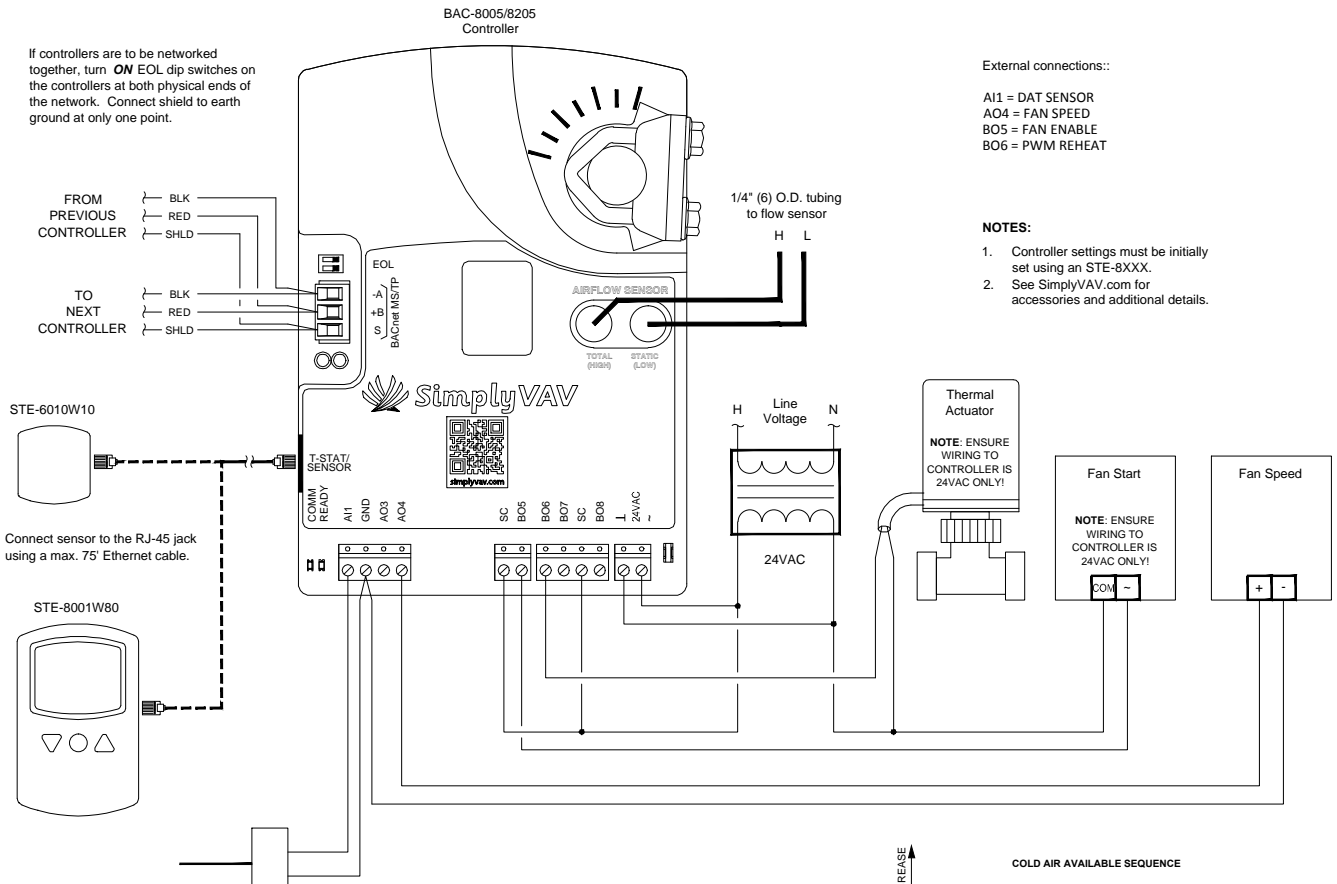
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



**Single Duct Variable Air Volume (VAV) Terminal Unit
Series Fan Powered with Time-Proportioned Reheat (PWM)
Pressure Independent
Model: BAC-8005/8205**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.



External connections::

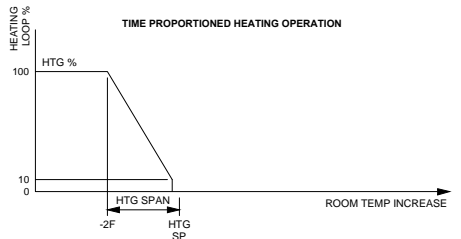
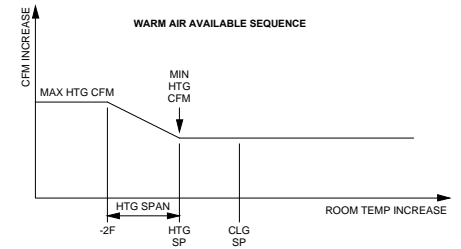
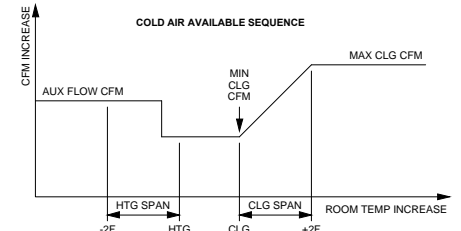
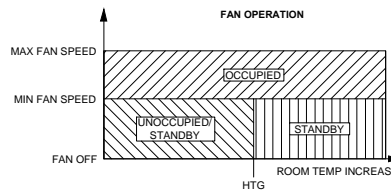
A11 = DAT SENSOR
AO4 = FAN SPEED
BO5 = FAN ENABLE
BO6 = PWM REHEAT

NOTES:

1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.

SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. The fan is started during occupied and standby modes. During unoccupied mode, the fan starts on a call for heating only. The fan stops only during unoccupied mode when there is no call for heat. During occupied mode, the fan runs at maximum fan speed. During standby and unoccupied modes, the fan runs at minimum fan speed.
5. As the space temp drops below the heating setpoint, the heating output is controlled in a 10 second based, time-proportioned manner. If the heating loop is less than 10%, the heating output remains at zero percent.
6. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.



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DRAWING TITLE: SERIES FPB W/PWM REHEAT

CREATION DATE: 3/7/2014

FILENAME: SS14010A_SimplyVAV_SER_FAN_PWM_RHT

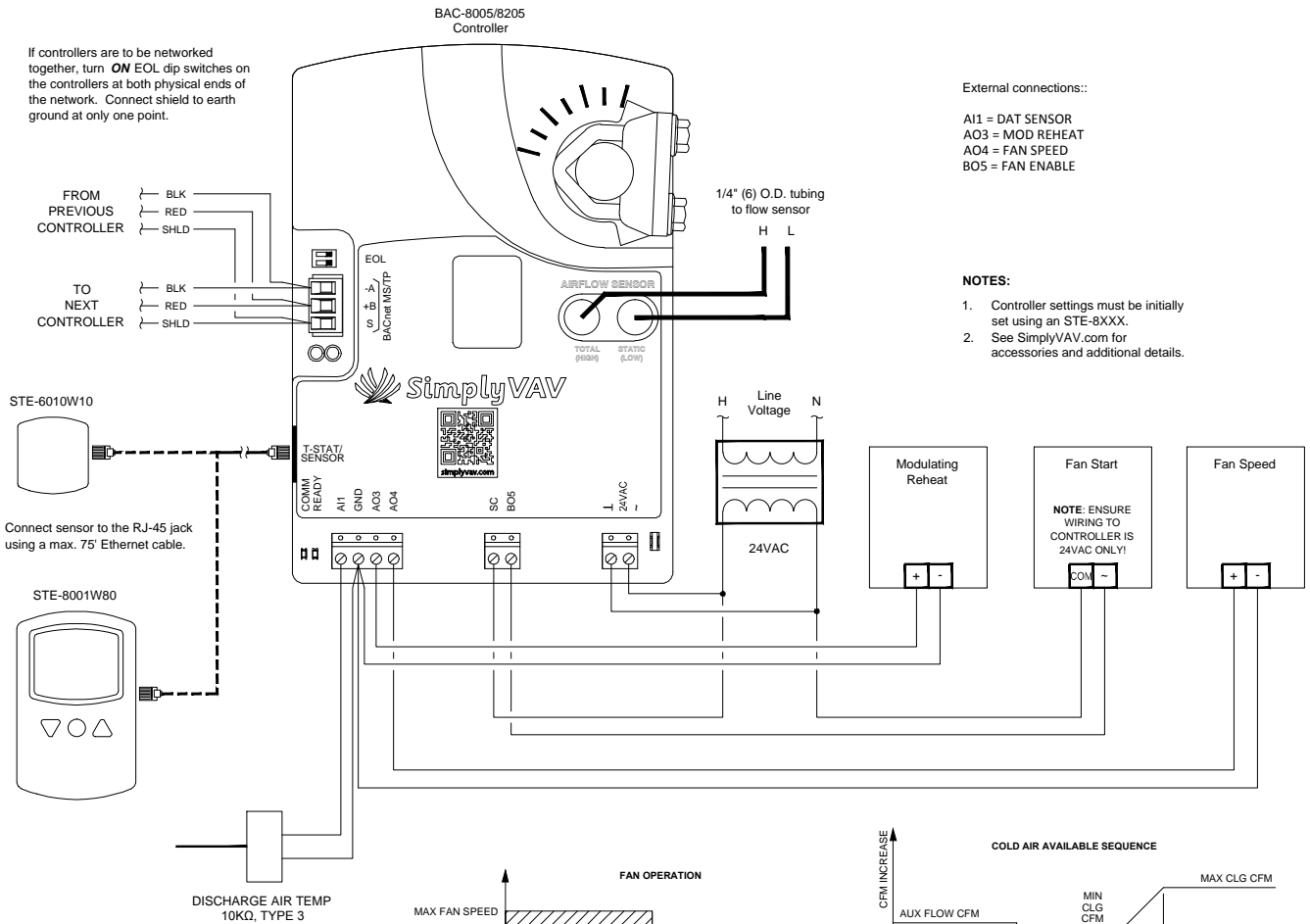
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



Single Duct Variable Air Volume (VAV) Terminal Unit
Parallel Fan Powered with Modulating Reheat
Pressure Independent
Model: BAC-8005/8205

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.

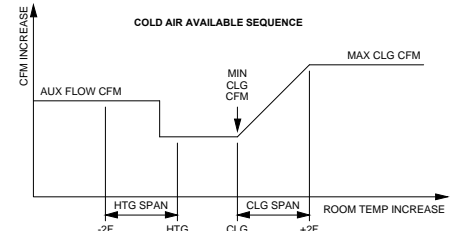
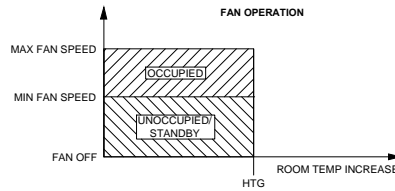


External connections::

- A11 = DAT SENSOR
- AO3 = MOD REHEAT
- AO4 = FAN SPEED
- BO5 = FAN ENABLE

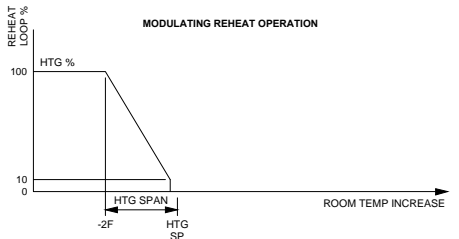
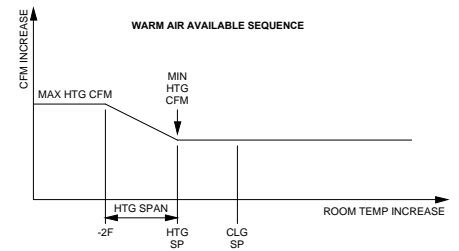
NOTES:

1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.



SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. The fan is started only on a call for heat. The fan stops if there is no call for heat. During occupied mode, the fan runs at maximum fan speed. During standby and unoccupied modes, the fan runs at minimum fan speed.
5. As the space temp drops below the heating setpoint, the heating output modulates open. As the space temp rises toward the heating setpoint, the heating output modulates closed. If the heating loop is less than 10%, the heating output remains at zero percent.
6. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.



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DRAWING TITLE: PARALLEL FPB W/MODULATING REHEAT

CREATION DATE: 3/7/2014

FILENAME: SS14011A_SimplyVAV_PAR_FAN_MOD_RHT

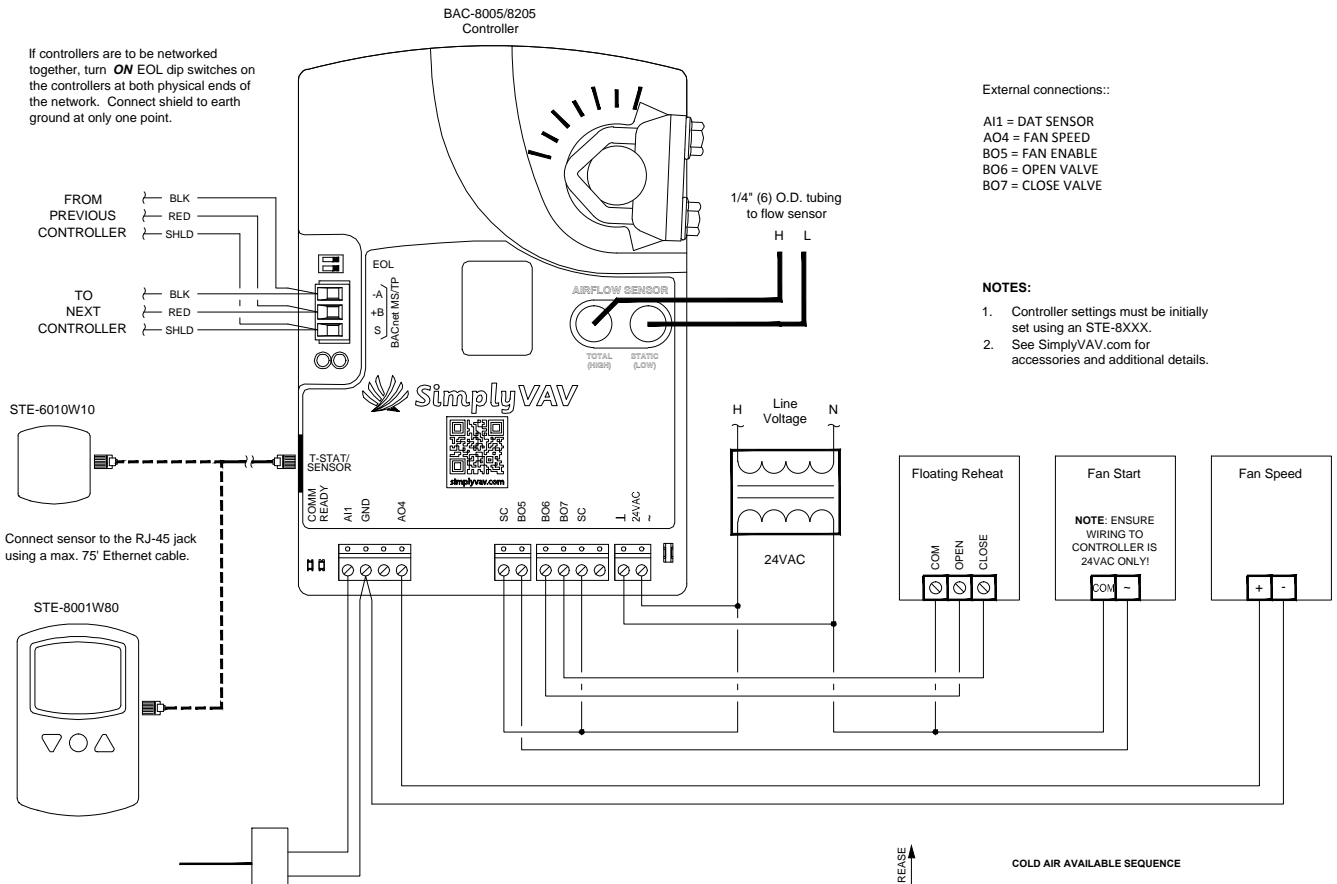
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



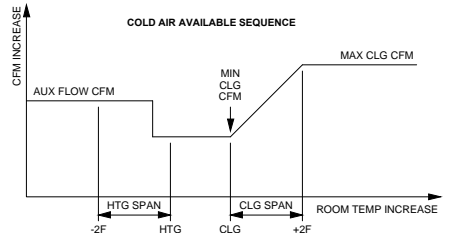
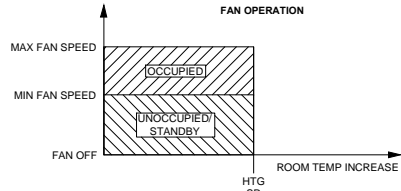
Single Duct Variable Air Volume (VAV) Terminal Unit
Parallel Fan Powered with Floating Reheat
Pressure Independent
Model: BAC-8005/8205

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.



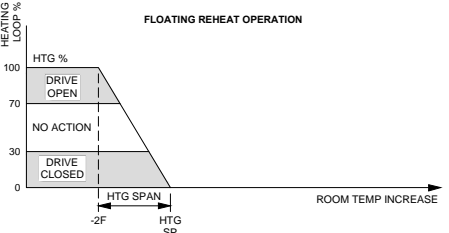
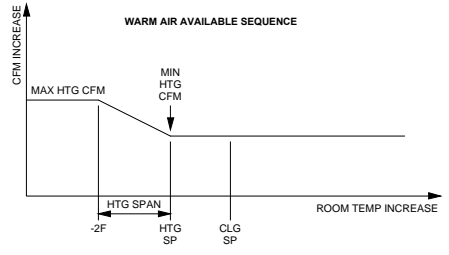
External connections:
 A11 = DAT SENSOR
 AO4 = FAN SPEED
 BO5 = FAN ENABLE
 BO6 = OPEN VALVE
 BO7 = CLOSE VALVE

NOTES:
 1. Controller settings must be initially set using an STE-8XXX.
 2. See SimplyVAV.com for accessories and additional details.



SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temperature drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. The fan is started only on a call for heat. The fan stops if there is no call for heat. During occupied mode, the fan runs at maximum fan speed. During standby and unoccupied modes, the fan runs at minimum fan speed.
5. As the space temp drops below the heating setpoint (heating loop is greater than 70%), the valve is driven open. As the space temp rises back toward the heating setpoint (heating loop is less than 30%), the valve is driven closed. If the loop is in between, there is no valve action.
6. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.



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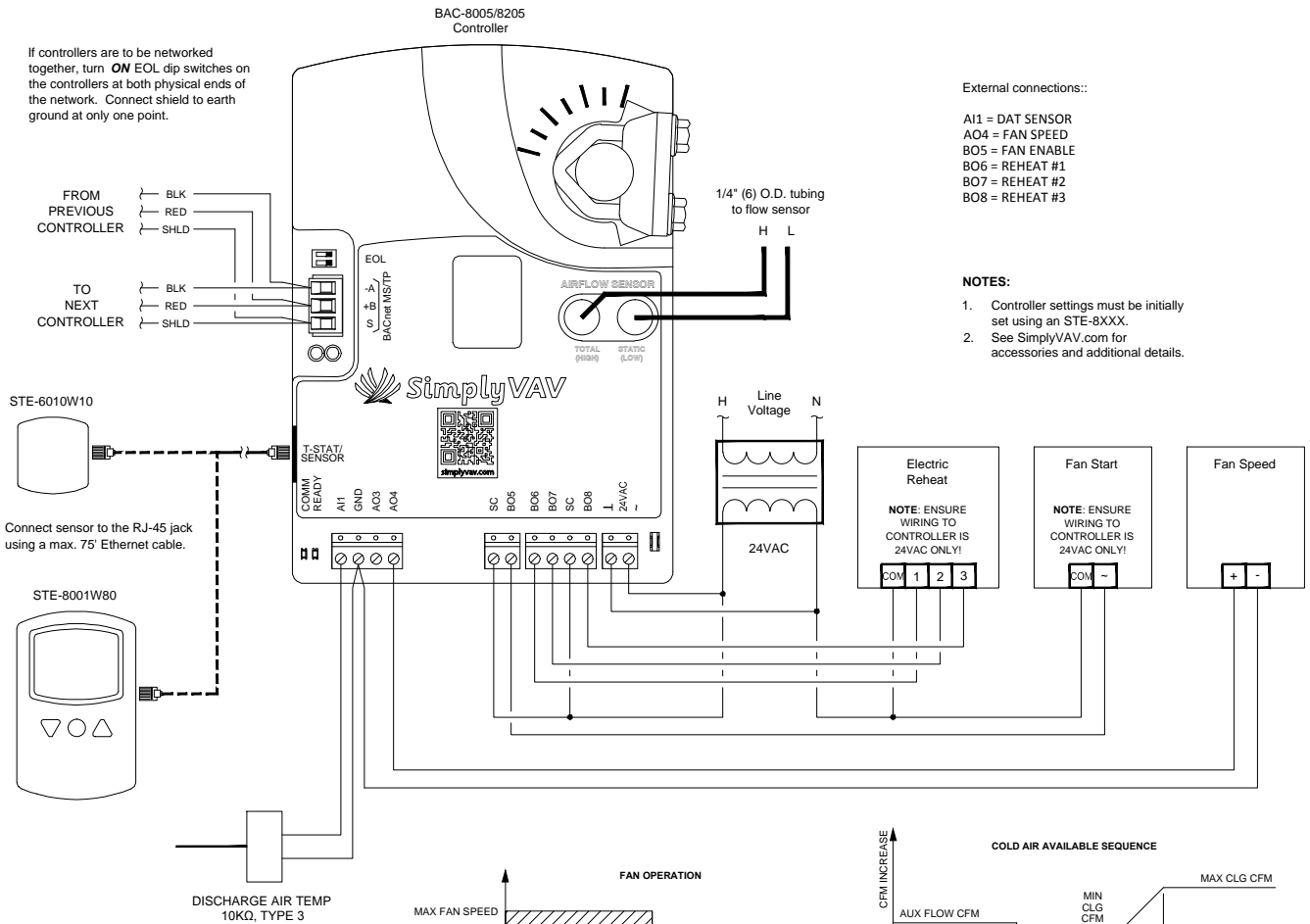
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 SimplyVAV.com

DRAWING TITLE: PARALLEL FPB W/FLOATING REHEAT	
CREATION DATE: 3/7/2014	FILENAME: SS14012A_SimplyVAV_PAR_FAN_FLOAT_RHT
REVISION DATE: 3/7/2014	REVISION: INITIAL RELEASE



Single Duct Variable Air Volume (VAV) Terminal Unit
Parallel Fan Powered with Staged Electric Reheat
Pressure Independent
Model: BAC-8005/8205

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.

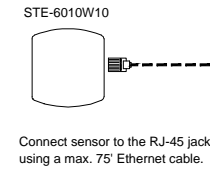


External connections::

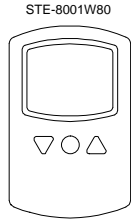
- A11 = DAT SENSOR
- AO4 = FAN SPEED
- BO5 = FAN ENABLE
- BO6 = REHEAT #1
- BO7 = REHEAT #2
- BO8 = REHEAT #3

NOTES:

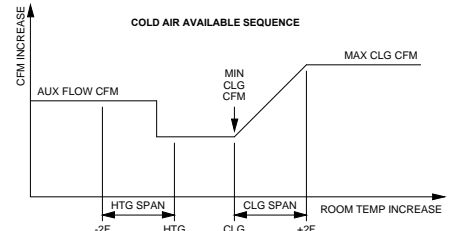
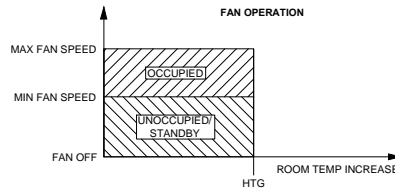
1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.



Connect sensor to the RJ-45 jack using a max. 75' Ethernet cable.

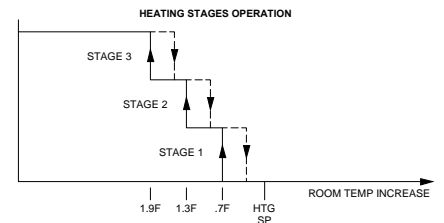
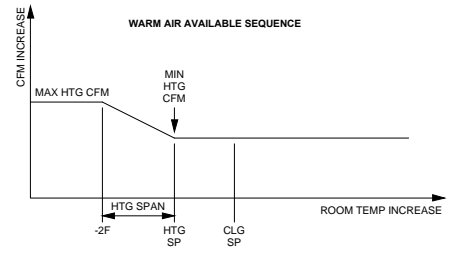


DISCHARGE AIR TEMP
10KΩ, TYPE 3



SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. The fan is started only on a call for heat. The fan stops if there is no call for heat. During occupied mode, the fan runs at maximum fan speed. During standby and unoccupied modes, the fan runs at minimum fan speed.
5. As the space temp drops below the heating setpoint, stages 1, 2 and 3 of electric reheat are energized respectively. As the space temp rises back toward the heating setpoint, heating stages 3, 2 and 1 turn off respectively.
6. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.



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DRAWING TITLE: PARALLEL FPB W/STAGED REHEAT

CREATION DATE: 3/7/2014

FILENAME: SS14013A_SimplyVAV_PAR_FAN_3STAGE_RHT

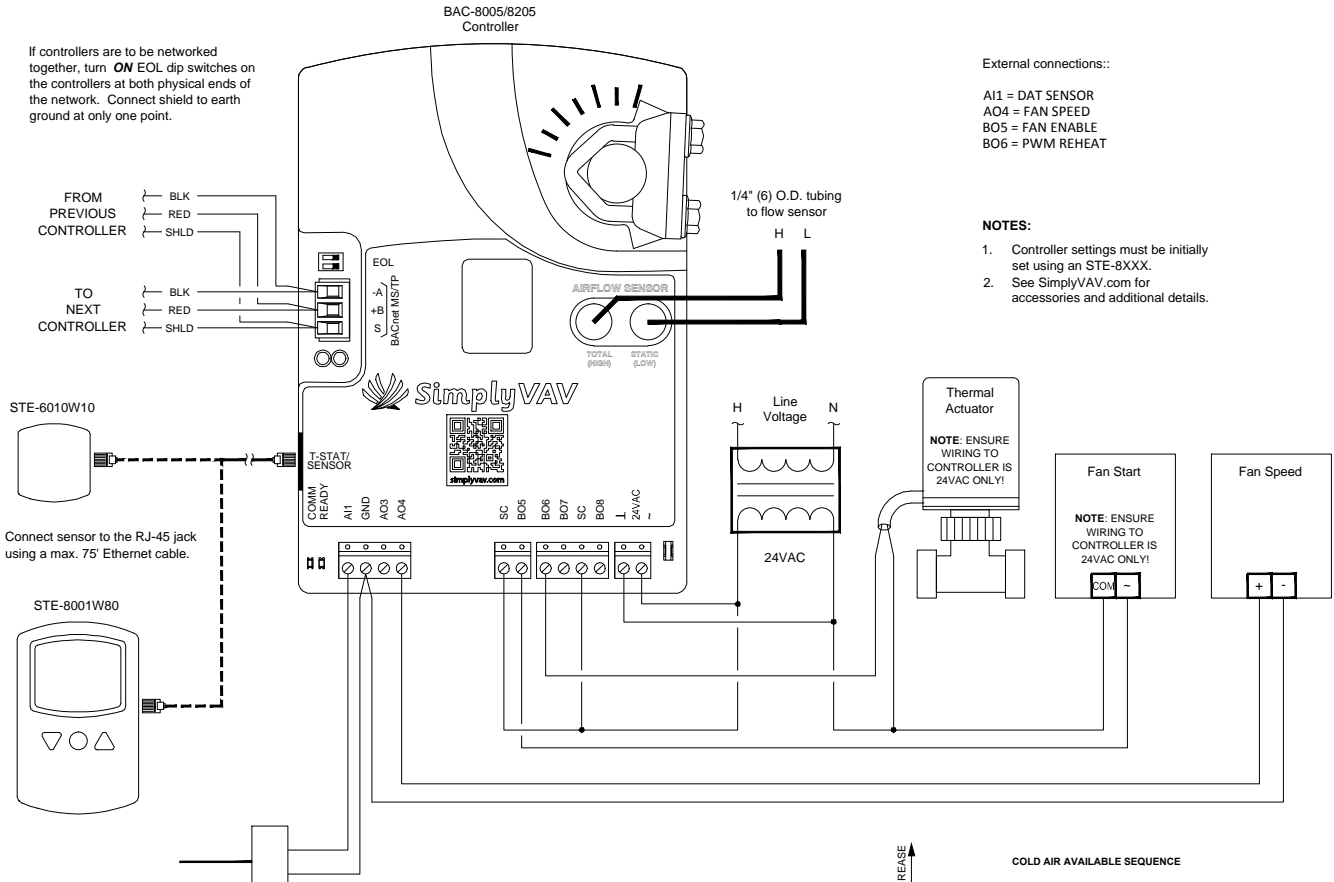
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



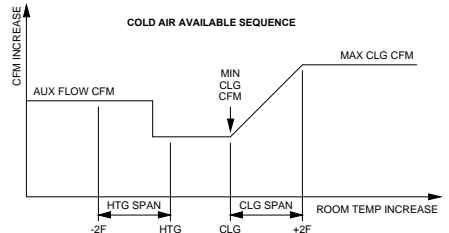
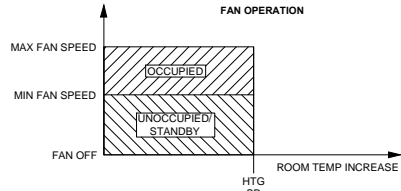
**Single Duct Variable Air Volume (VAV) Terminal Unit
Parallel Fan Powered with Time-Proportioned Reheat (PWM)
Pressure Independent
Model: BAC-8005/8205**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.



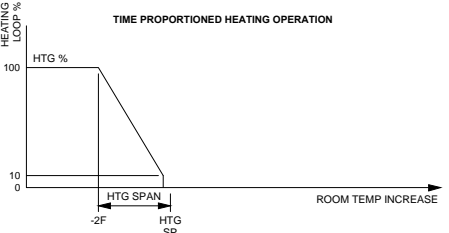
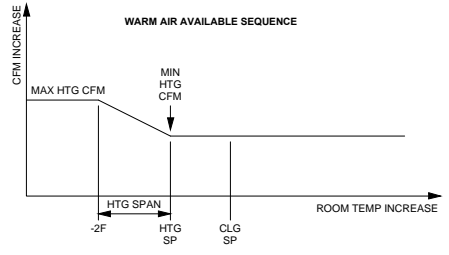
External connections:
A11 = DAT SENSOR
A04 = FAN SPEED
B05 = FAN ENABLE
B06 = PWM REHEAT

NOTES:
1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.



SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: As space temperature rises above the cooling setpoint, the controller increases airflow. At a space temperature of 2°F above the cooling setpoint, maximum cooling airflow is maintained. On a decrease in space temperature, the controller reduces airflow. From cooling setpoint to heating setpoint, minimum cooling airflow is maintained. If the temperature drops further and heating is required, the auxiliary flow rate is maintained.
3. Warm air available: As space temp drops below the heating setpoint, the controller increases airflow. At a temperature 2°F below the heating setpoint, maximum heating airflow is maintained. On an increase in space temperature, airflow decreases. As space temperature rises above the heating setpoint, minimum heating airflow is maintained.
4. The fan is started only on a call for heat. The fan stops if there is no call for heat. During occupied mode, the fan runs at maximum fan speed. During standby and unoccupied modes, the fan runs at minimum fan speed.
5. As the space temp drops below the heating setpoint, the heating output is controlled in a 10 second based, time-proportioned manner. If the heating loop is less than 10%, the heating output remains at zero percent.
6. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.



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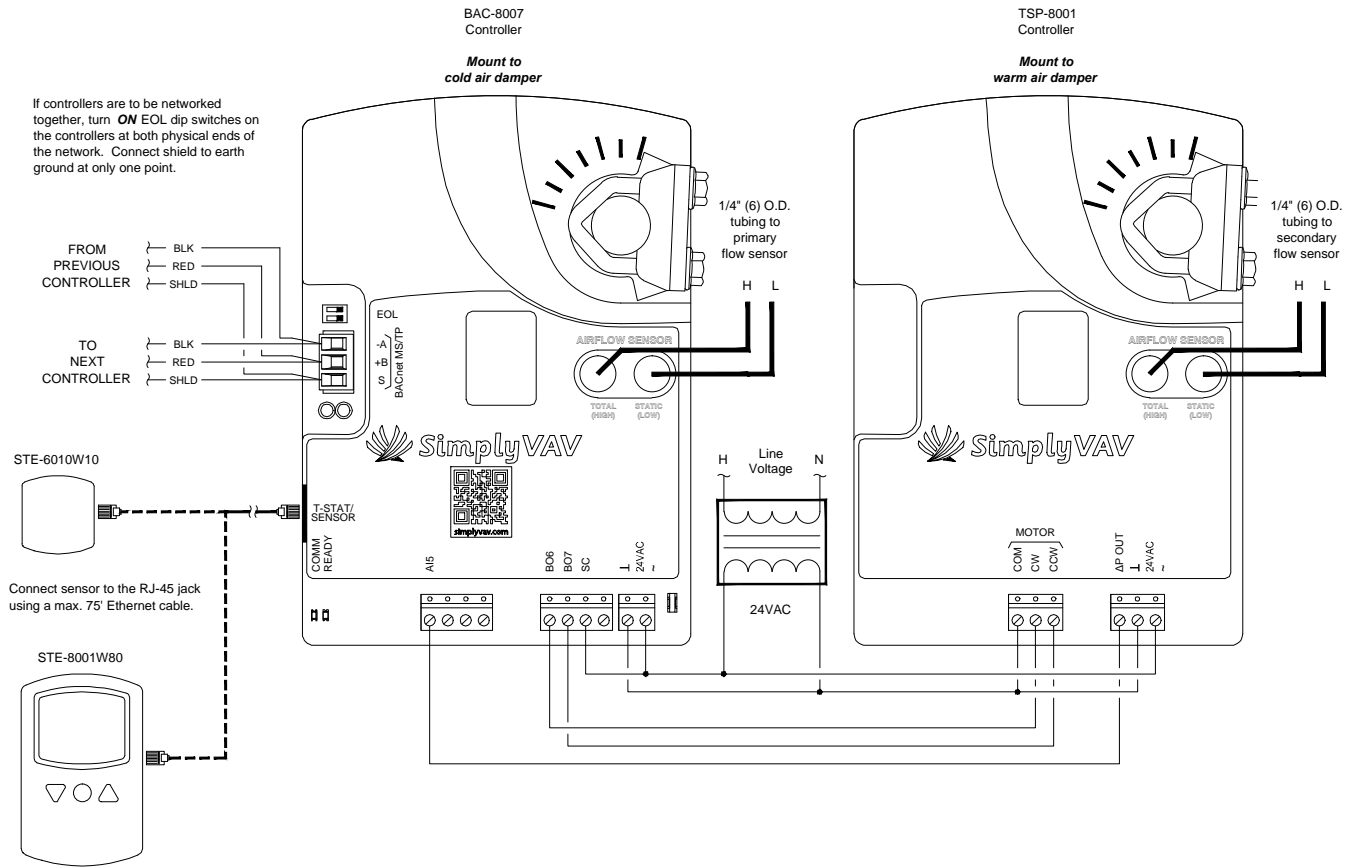
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SimplyVAV.com

DRAWING TITLE: PARALLEL FPB W/PWM REHEAT	
CREATION DATE: 3/7/2014	FILENAME: SS14014A_SimplyVAV_PAR_FAN_PWM_RHT
REVISION DATE: 3/7/2014	REVISION: INITIAL RELEASE



Dual Duct Variable Air Volume (VAV) Terminal Unit Pressure Independent Model: BAC-8007

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.



External connections::

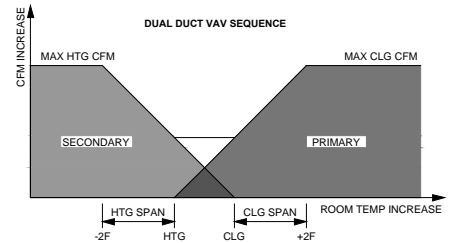
AIS = SECONDARY FLOW
BO6 = SECONDARY CW
BO7 = SECONDARY CCW

NOTES:

1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.

SEQUENCE OF OPERATION:

1. As the space temperature rises above the cooling setpoint, the primary airflow is modulated from the Cooling Minimum flow to the Cooling Maximum Flow.
2. As the space temperature falls below the heating setpoint, the secondary airflow is modulated from the Heating Minimum flow to the Heating Maximum Flow.
3. Between the heating and cooling setpoints, both the primary airflow and secondary airflow are modulated to maintain the Dual Mixing Minimum.



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DRAWING TITLE: DUAL DUCT TERMINAL UNIT - CAV

CREATION DATE: 3/7/2014

FILENAME: SS14015A_SimplyVAV_DD_VAV

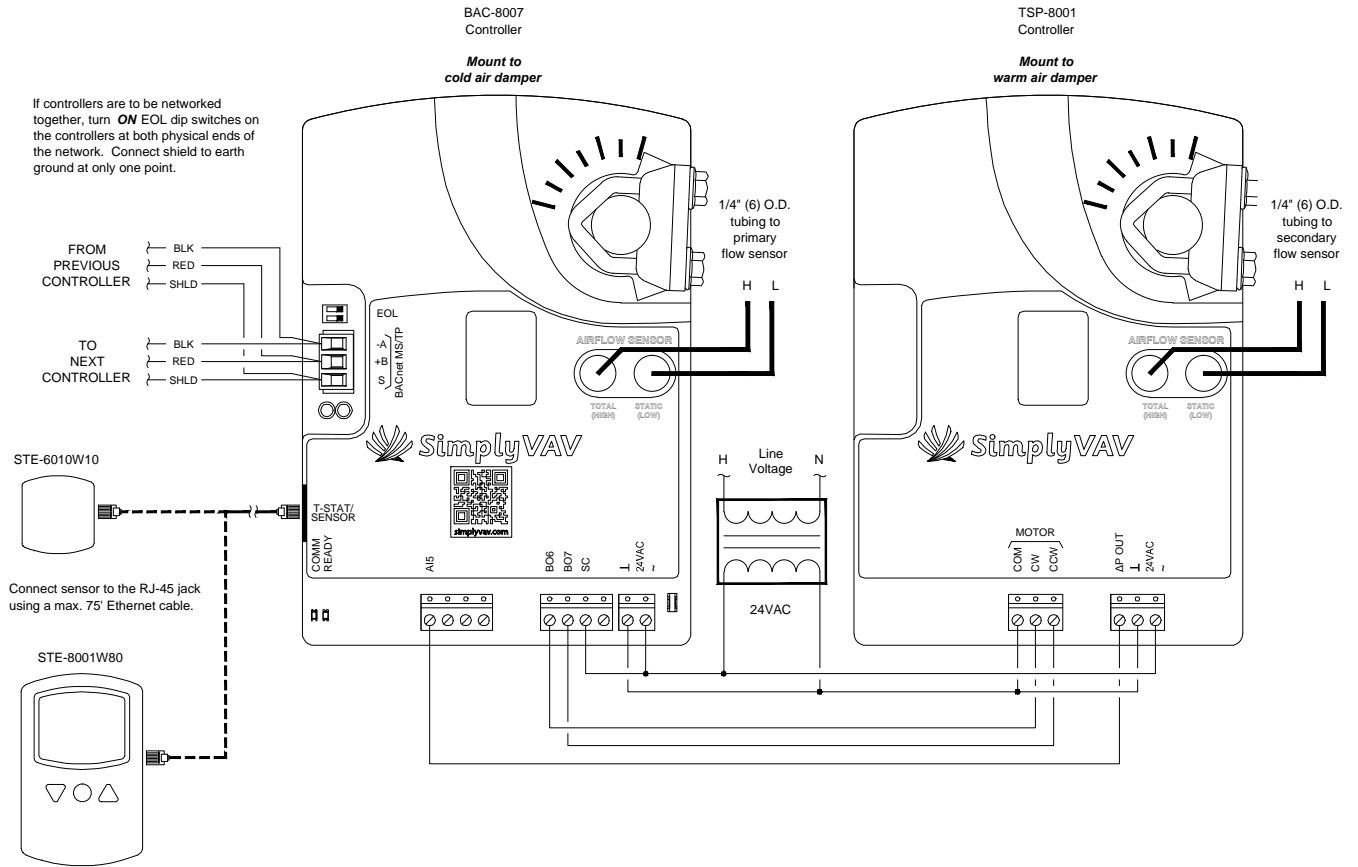
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



**Dual Duct Constant Air Volume (CAV) Terminal Unit
Pressure Independent
Model: BAC-8005/8205**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.



External connections::

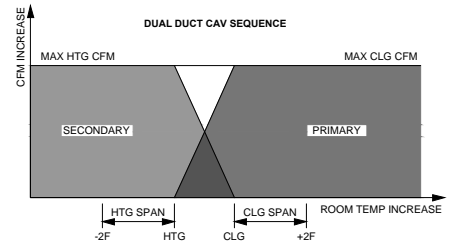
AIS = SECONDARY FLOW
BO6 = SECONDARY CW
BO7 = SECONDARY CCW

NOTES:

1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.

SEQUENCE OF OPERATION:

1. As the space temperature rises above the cooling setpoint, the primary airflow is modulated from the Cooling Minimum flow to the Cooling Maximum Flow.
2. As the space temperature falls below the heating setpoint, the secondary airflow is modulated from the Heating Minimum flow to the Heating Maximum Flow.
3. Between the heating and cooling setpoints, both the primary airflow and secondary airflow are modulated to maintain the Dual Mixing Minimum.



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DRAWING TITLE: DUAL DUCT TERMINAL UNIT - CAV

CREATION DATE: 3/7/2014

FILENAME: SS14016A_SimplyVAV_DD_CAV

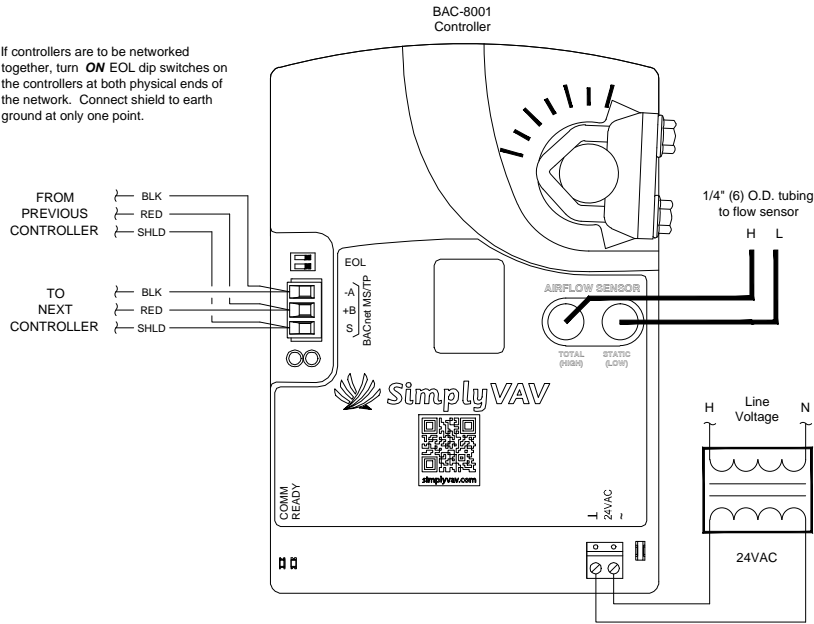
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



**Single Duct Constant Air Volume (CAV) Terminal Unit
Cooling Only
Pressure Independent
Model: BAC-8001**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.

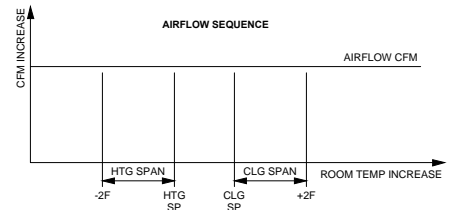


NOTES:

1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.

SEQUENCE OF OPERATION:

1. Airflow setpoint is maintained.



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DRAWING TITLE: SINGLE DUCT TERMINAL UNIT - CAV

CREATION DATE: 3/7/2014

FILENAME: SS14017A_SimplyVAV_SD_CAV

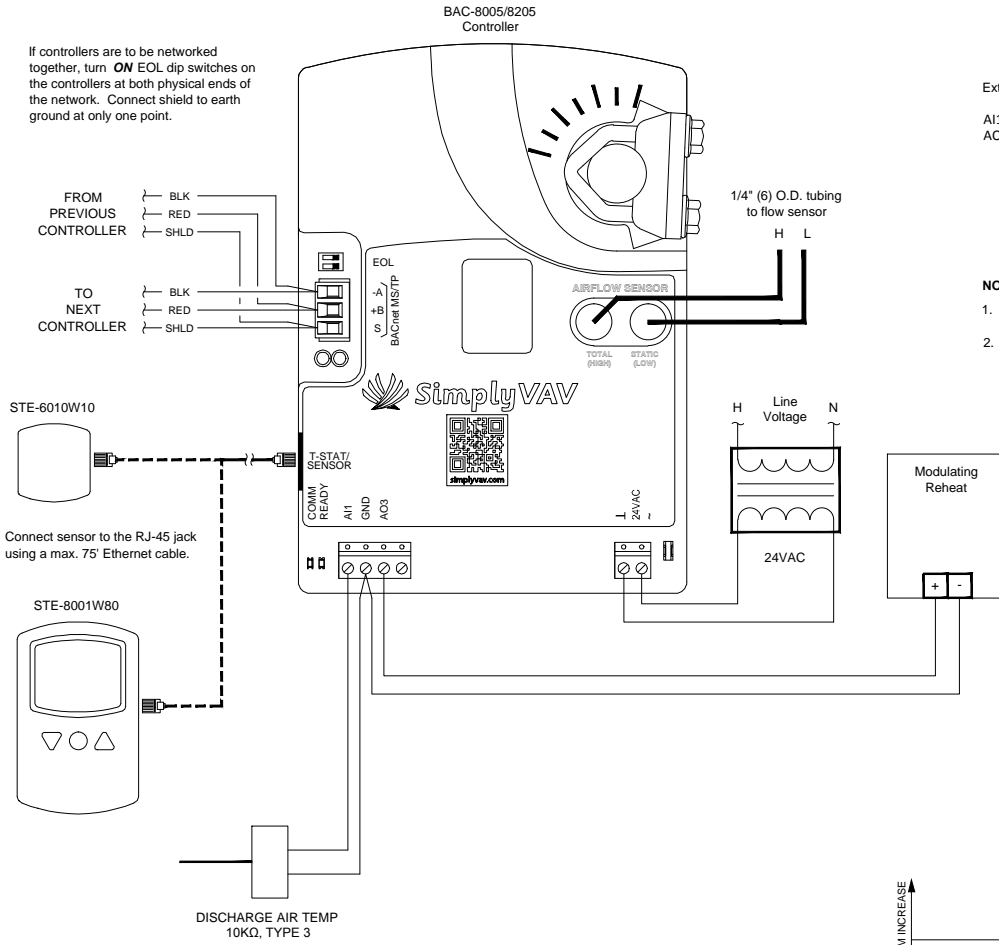
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



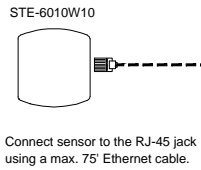
**Single Duct Constant Air Volume (CAV) Terminal Unit
Cooling with Modulating Reheat
Pressure Independent
Model: BAC-8005/8205**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.

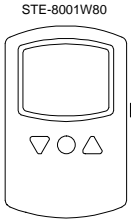


External connections:
A11 = DAT SENSOR
AO3 = MOD REHEAT

- NOTES:**
1. Controller settings must be initially set using an STE-8XXX.
 2. See SimplyVAV.com for accessories and additional details.



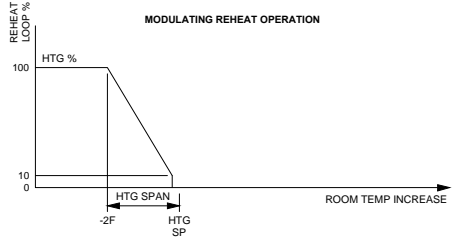
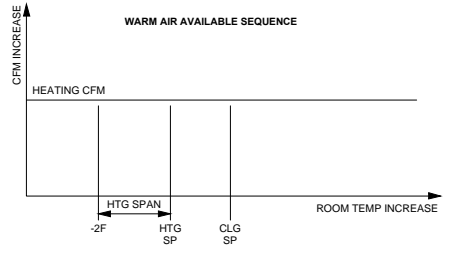
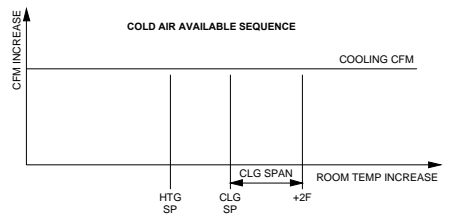
Connect sensor to the RJ-45 jack using a max. 75' Ethernet cable.



DISCHARGE AIR TEMP
10KΩ, TYPE 3

SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: Constant cooling airflow is maintained.
3. Warm air available: Constant heating airflow is maintained.
4. As the space temp drops below the heating setpoint, the heating output modulates open. As the space temp rises toward the heating setpoint, the heating output modulates closed. If the heating loop is less than 10%, the heating output remains at zero percent.
5. If DAT limiting is enabled and a DAT sensor is detected, the discharge air setpoint is limited to a maximum of 15°F above space temperature.



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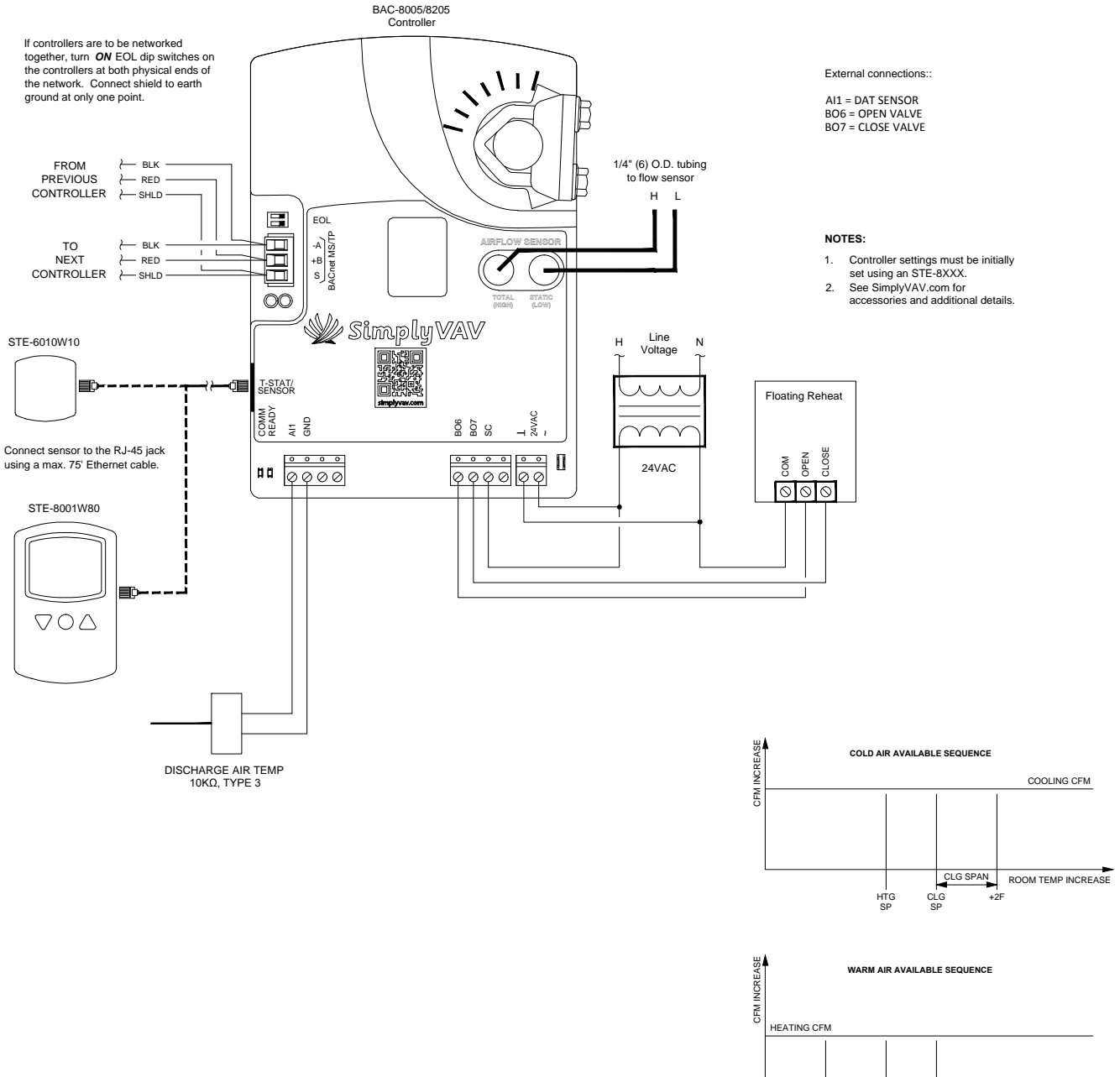
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DRAWING TITLE: SINGLE DUCT TERMINAL UNIT - CAV W/MODULATING REHEAT	
CREATION DATE: 3/7/2014	FILENAME: SS14018A_SimplyVAV_SD_CAV_MOD_RHT
REVISION DATE: 3/7/2014	REVISION: INITIAL RELEASE



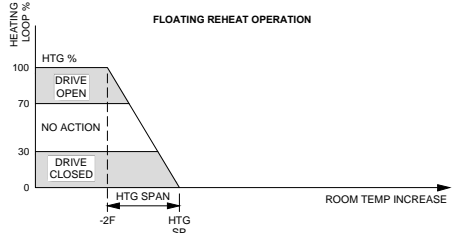
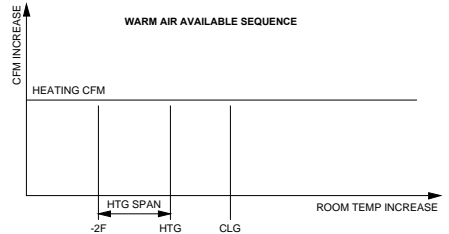
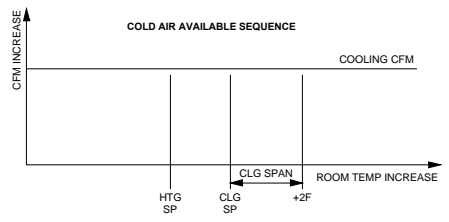
**Single Duct Constant Air Volume (CAV) Terminal Unit
Cooling with Floating Reheat
Pressure Independent
Model: BAC-8005/8205**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.



External connections:
A11 = DAT SENSOR
BO6 = OPEN VALVE
BO7 = CLOSE VALVE

NOTES:
1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.



SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: Constant cooling airflow is maintained.
3. Warm air available: Constant heating airflow is maintained.
4. As the space temp drops below the heating setpoint (heating loop is greater than 70%), the valve is driven open. As the space temp rises back toward the heating setpoint (heating loop is less than 30%), the valve is driven closed. If the loop is in between, there is no valve action.
5. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.

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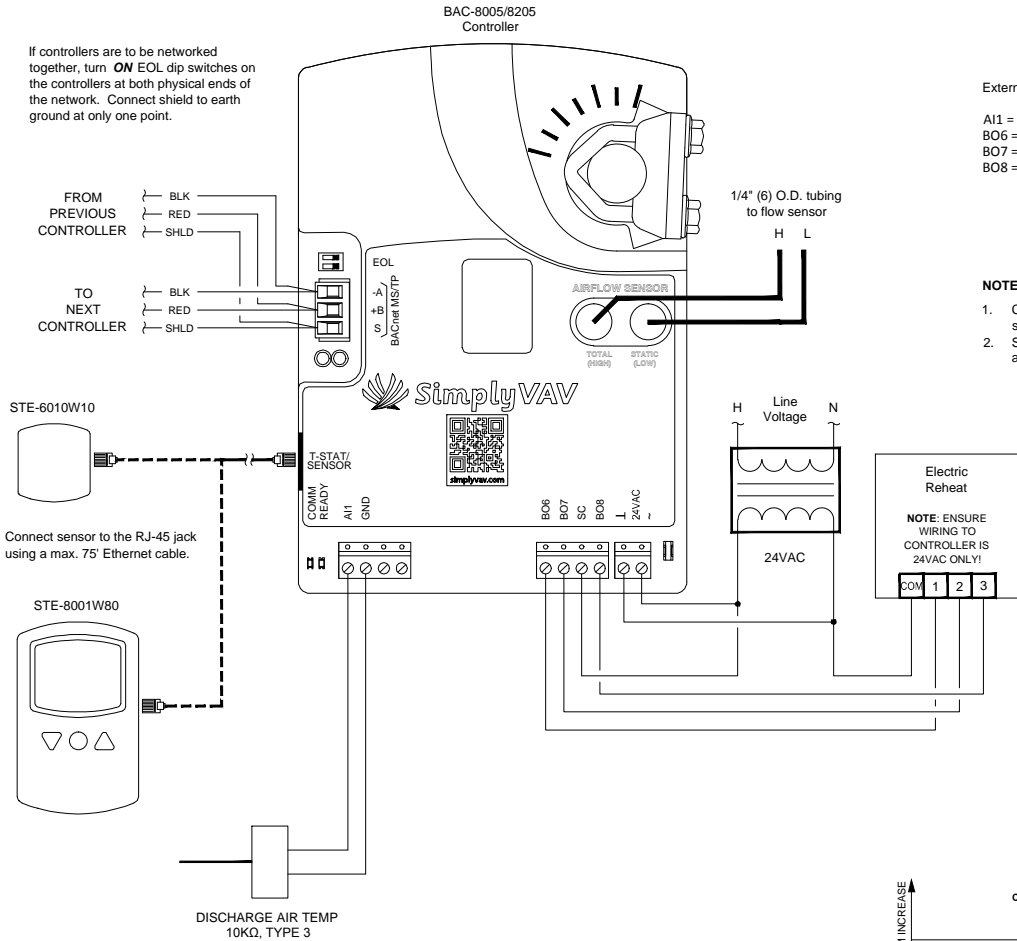
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DRAWING TITLE: SINGLE DUCT TERMINAL UNIT - CAV W/FLOATING REHEAT			
CREATION DATE:	3/7/2014	FILENAME:	SS14019A_SimplyVAV_SD_CAV_FLOAT_RHT
REVISION DATE:	3/7/2014	REVISION:	INITIAL RELEASE



**Single Duct Constant Air Volume (CAV) Terminal Unit
Cooling with Staged Electric Reheat
Pressure Independent
Model: BAC-8005/8205**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.



External connections:

- A11 = DAT SENSOR
- BO6 = REHEAT #1
- BO7 = REHEAT #2
- BO8 = REHEAT #3

NOTES:

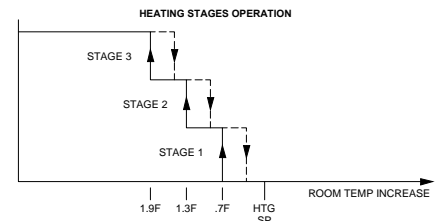
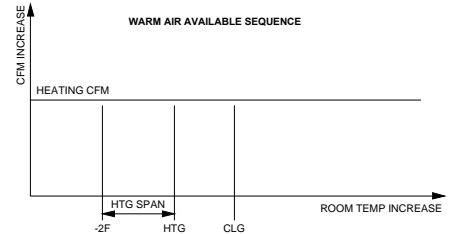
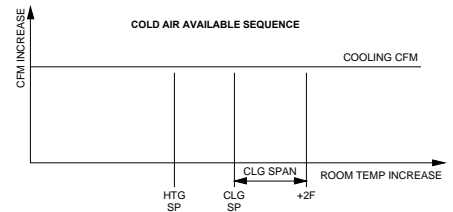
1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.

STE-6010W10

Connect sensor to the RJ-45 jack using a max. 75' Ethernet cable.

STE-8001W80

DISCHARGE AIR TEMP
10KΩ, TYPE 3



SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: Constant cooling airflow is maintained.
3. Warm air available: Constant heating airflow is maintained.
4. As the space temp drops below the heating setpoint, stages 1, 2 and 3 of electric reheat are energized respectively. As the space temp rises back toward the heating setpoint, heating stages 3, 2 and 1 turn off respectively.
5. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.

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DRAWING TITLE: SINGLE DUCT TERMINAL UNIT - CAV W/STAGED REHEAT

CREATION DATE: 3/7/2014

FILENAME: SS14020A_SimplyVAV_SD_CAV_3STAGE_RHT

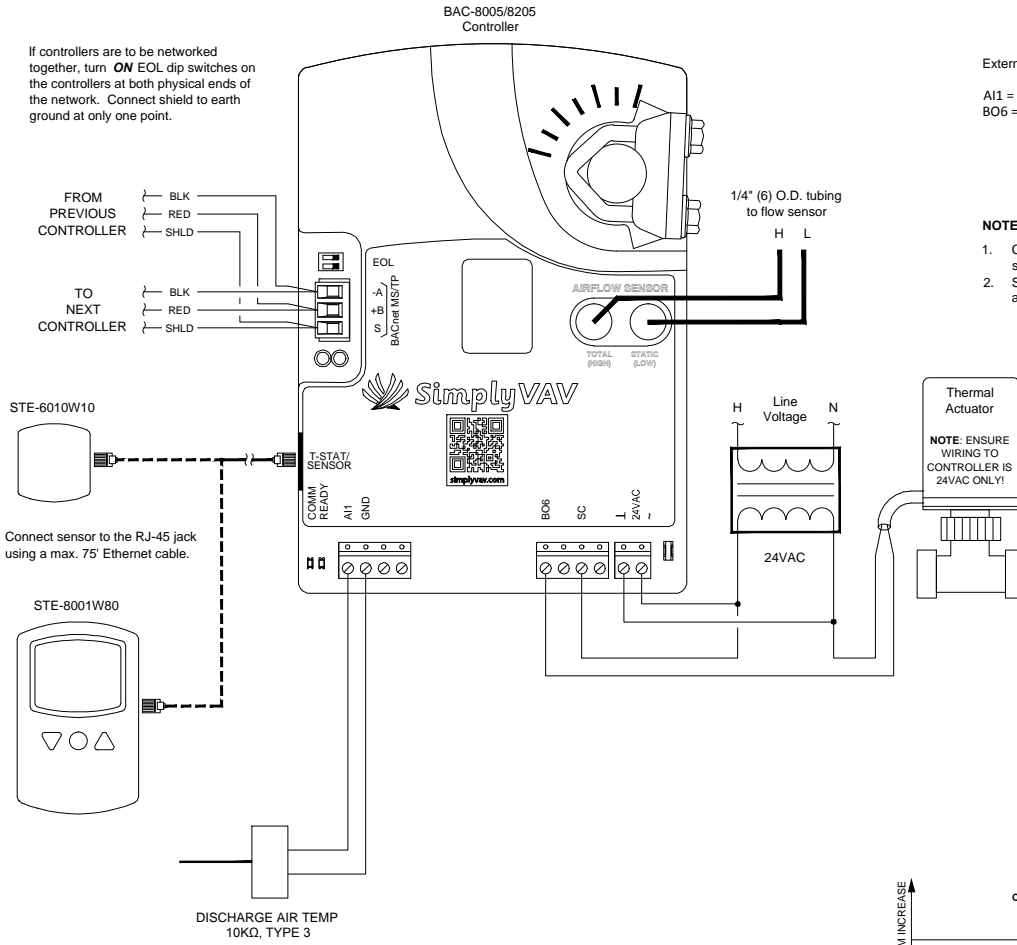
REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE



**Single Duct Constant Air Volume (CAV) Terminal Unit
Cooling with Time-Proportioned Reheat (PWM)
Pressure Independent
Model: BAC-8005/8205**

If controllers are to be networked together, turn **ON** EOL dip switches on the controllers at both physical ends of the network. Connect shield to earth ground at only one point.

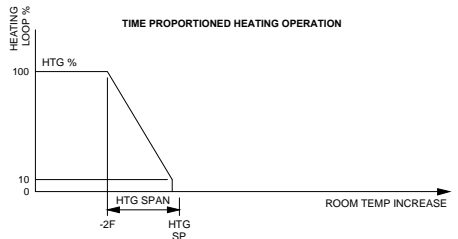
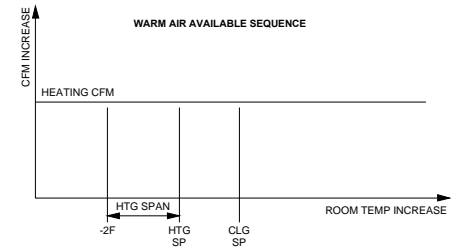
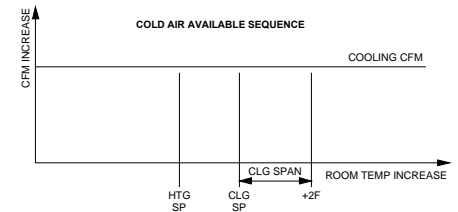


External connections::

A11 = DAT SENSOR
BO6 = PWM REHEAT

NOTES:

1. Controller settings must be initially set using an STE-8XXX.
2. See SimplyVAV.com for accessories and additional details.



SEQUENCE OF OPERATION:

1. Changeover: If the discharge air temperature (DAT) drops below 72°F, cool air is said to be available. As the DAT rises above 76°F, warm air is said to be available. Any time warm air is available, auxiliary heat is locked out.
2. Cool air available: Constant cooling airflow is maintained.
3. Warm air available: Constant heating airflow is maintained.
4. As the space temp drops below the heating setpoint, the heating output is controlled in a 10 second based, time-proportioned manner. If the heating loop is less than 10%, the heating output remains at zero percent.
5. If DAT limiting is enabled and a DAT sensor is detected, the discharge air reheat setpoint is determined based on the heating loop. The discharge air setpoint is limited to a maximum of 15°F above space temperature.

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DRAWING TITLE: SINGLE DUCT TERMINAL UNIT - CAV W/PWM REHEAT

CREATION DATE: 3/7/2014

FILENAME: SS14021A_SimplyVAV_SD_CAV_PWM_RHT

REVISION DATE: 3/7/2014

REVISION: INITIAL RELEASE