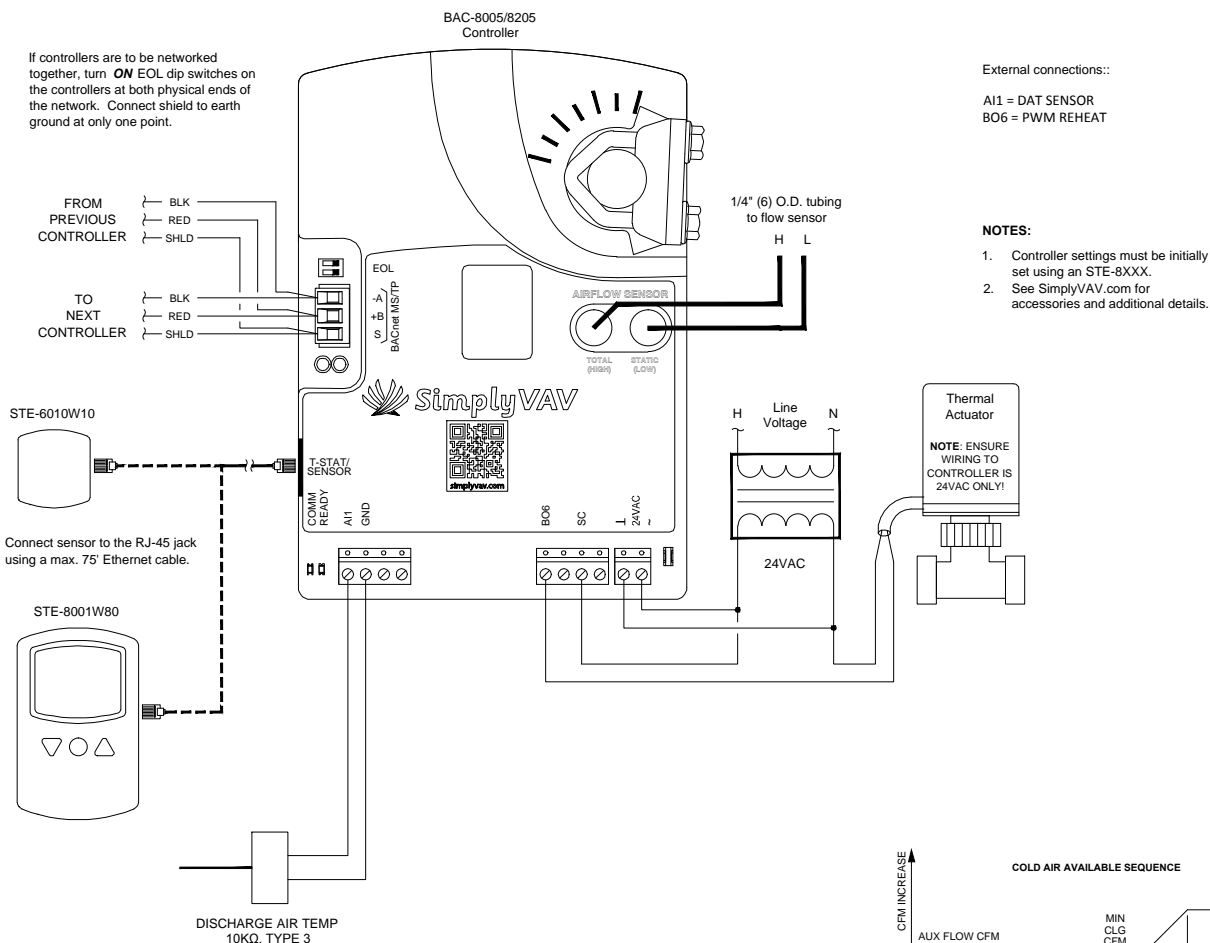




# Single Duct Variable Air Volume (VAV) Terminal Unit Cooling with Time-Proportioned Reheat (PWM) Pressure Independent Model: BAC-8005/8205

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.

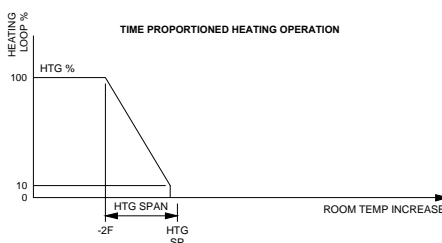
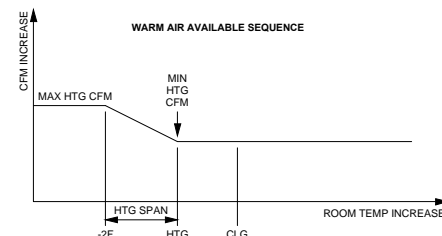
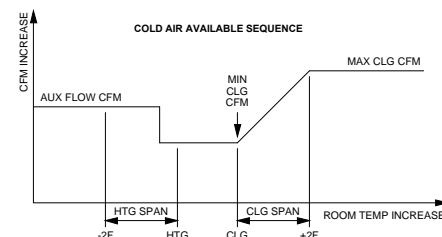


External connections::

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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KMC CONTROLS, INC.  
19476 INDUSTRIAL DR.  
NEW PARIS, IN 46553  
PHONE: 574.831.5250  
FAX: 574.831.5252  
SimplyVAV.com

DRAWING TITLE: COOLING VAV W/PWM REHEAT

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