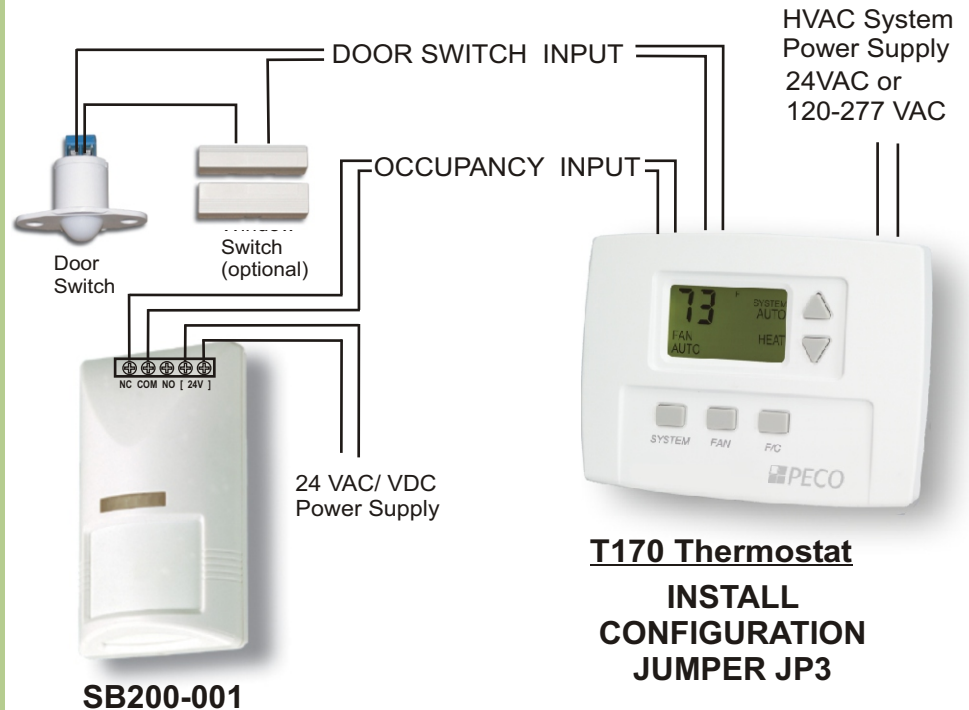


The T170/SB200 energy management system captures energy savings by setting back HVAC operation. Internal High and Low temperature setback limits can be set to assure adequate recovery times, assuring occupant comfort. Applications include hotel guest rooms, meeting rooms, vacation rentals, military lodging and dormitories.



T170 / SB200
Energy Management System
Intelligent Thermostat Operation

T170/SB200 Occupancy Operation

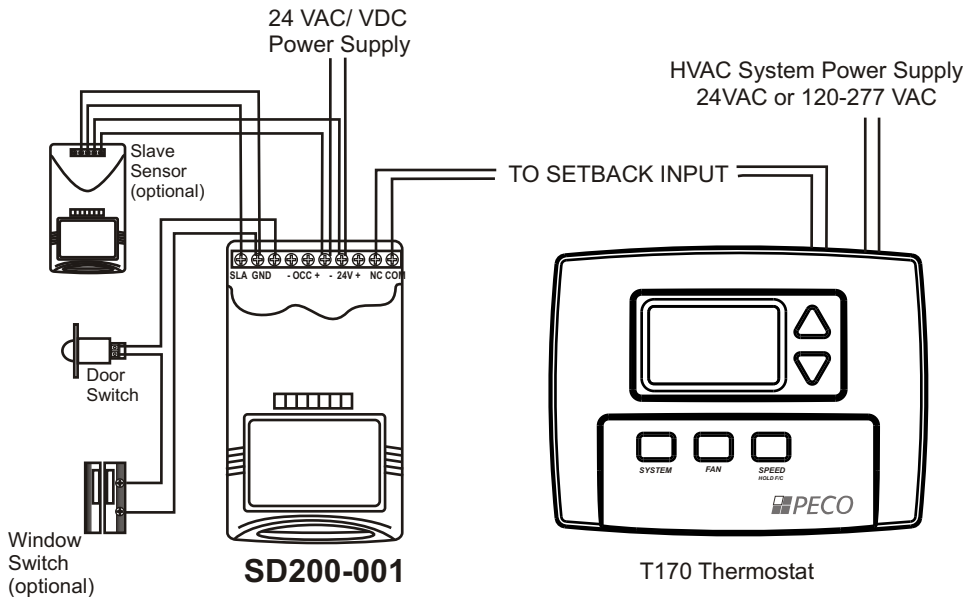
The SB200 Occupancy sensor switch is open in occupied mode and closed in unoccupied mode. The Door Switch open when the door is open and closed when the door is closed.

In an occupied mode the thermostat operates normally and looks for a door open signal. When the door opens (door open signal) the thermostat waits for a door close. If door is open for more than 2-minutes the thermostat turns the HVAC system outputs to OFF. During this two minute period, if a button is pressed on the keypad, the time delay is extended to 10 minutes. The time delay can only be extended once. Once the HVAC outputs transition to off, a door closure is required to re-enable the outputs.

On a door close the thermostat starts a two-minute timer and looks for an occupancy detection. If the timer expires and no occupancy is detected, the thermostat transitions to unoccupied state. If occupancy is detected while the timer is running the thermostat will remain in the occupied state

In the unoccupied state the thermostat sets heating and cooling set points to setback values, as determined by factory or user settings. In this mode the fan is automatically set to cycle with demand. Thermostat continually monitors the occupancy sensor and will go to the Occupied State if occupancy is detected.

If the installation is only using a Door/ Window Switch the thermostat will disable the HVAC outputs if this output is open for longer than 2 minutes. This application requires a jumper between the Occupancy input.



SD200-001 HVAC Energy Management

The SD200-001 and a DS-100 Door Switch use advanced microprocessor logic to determine occupancy. A door open signal will initiate occupancy status detection. If the room sensor determines that a room is occupied it will allow normal HVAC control. It waits for another door open signal before determining occupancy again. If the system is set to unoccupied, the sensor continually monitors the room. Any occupancy detection will set the operation to occupied. The window switch and slave sensor are optional.

**For Applications using the Setback Input:
REMOVE CONFIGURATION JUMPER JP3**

SD200-002 HVAC Time Based Detection

The SD200-002 is a stand alone sensor. An OFF delay is started with each occupancy detection. This delay can be set for up to 30 minutes. This system provides basic room setback and is ideal for control of HVAC in commercial spaces. Programmable high-low setback limits can be set to assure adequate HVAC recovery.

