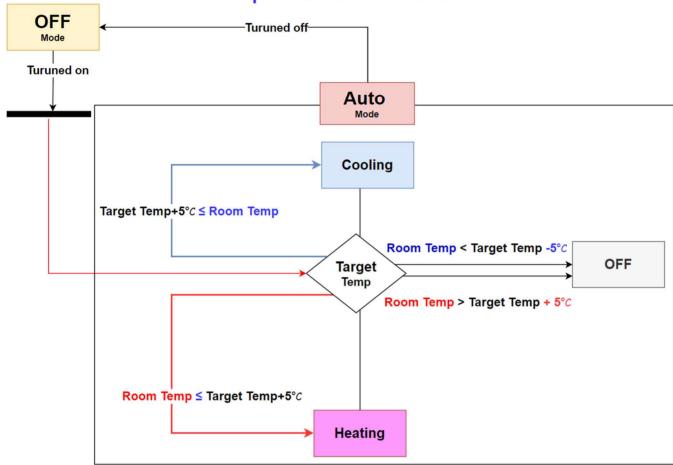
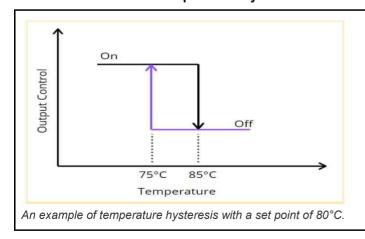
Thermostat FSM

- Room temp: Sensing temperature
- Target temp: Setting temperature.
- $*5^{\circ}C$ degrees(hysteresis of $5^{\circ}C$)

power state machine



Definition of Temperature Hysteresis



In a temperature controller, temperature hysteresis is defined by a minimum and maximum temperature value, where the heat will be turned on and off respectively.

For example, if the Room's temperature is to be maintained at $80^{\circ}C$ with a hysteresis of $5^{\circ}C$, the cooling fan will activate when the temperature reaches $85^{\circ}C$ and turn off when the temperature drops to $75^{\circ}C$.