

Control systems for guest rooms can also be integrated with hotel's central control and monitoring system which would not only provide a centralised control for the hotel operator but also provide holistic approach to optimise energy savings and guestroom comfort.

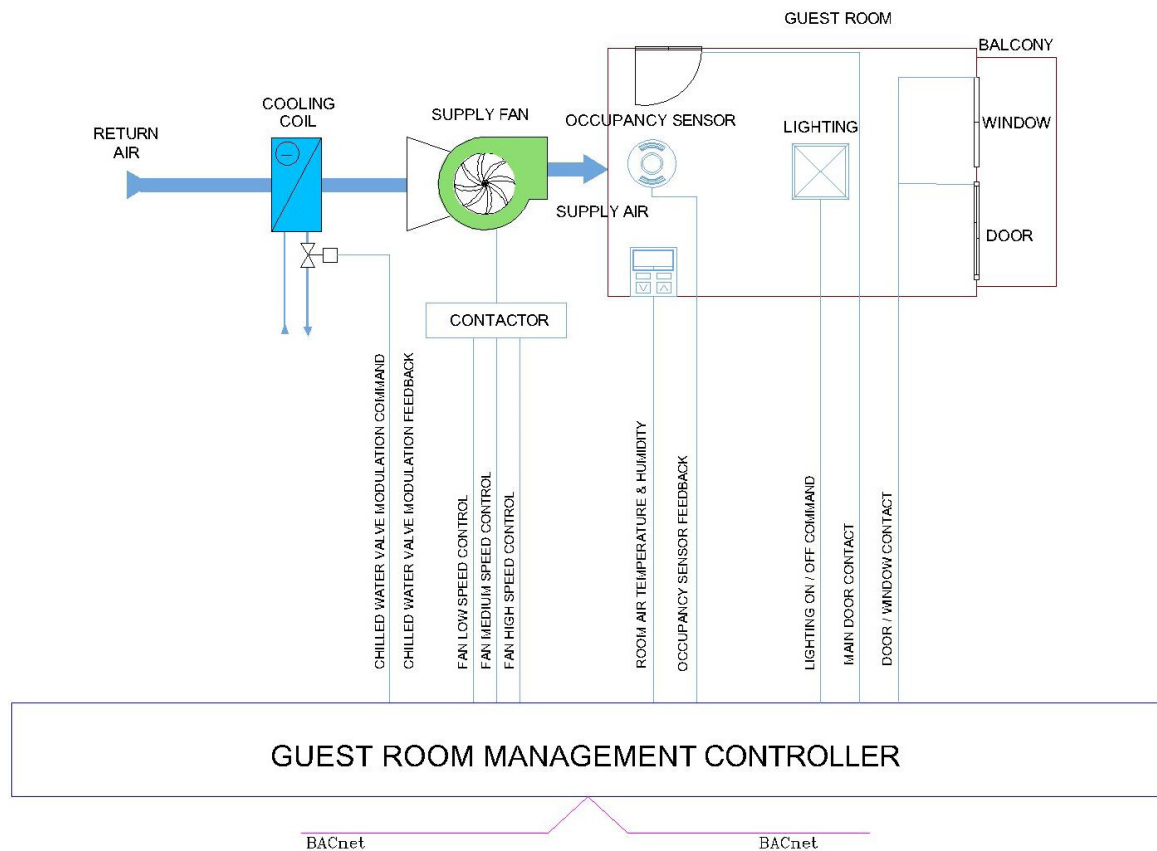


Fig. 502.09(1): Typical Guest Room Management System (GRMS) Control

A typical control system schematic of guest room management system is shown in fig. 502.9(1). It consists of the following components:

- Standalone Thermostat
- Occupancy Sensor
- Window Contact

Standalone Thermostat:

Thermostat allows guest to manually adjust the temperature set-points and air speed of the air conditioning unit. The standalone thermostat also has an integrated temperature sensor, which will compare the room temperature with the desired temperature set-point and modulate the 2-way chilled water valve to maintain the room temperature at the pre-set conditions (e.g. $23\text{ }^{\circ}\text{C} \pm 1^{\circ}\text{C}$) while the 3-speed fan will be running at the selected speed.

Occupancy Sensor:

Occupancy sensor will define the occupancy mode for the room. Upon sensing no occupancy, it relays command to the standalone GRMS controller after a predefined time delay. This would in turn shut-off the air conditioning unit and lighting.