

### **RTU-1 & RTU-2 Hood On - MAU Simple Sequence**

- **RTU-1 Only:** Hood on enable input from kitchen hood controller as required (Input Forces into MAU Mode)
- **RTU-2 Only:** Remote occupied input from kitchen hood controller as required
- Supply fan to modulate via signal from kitchen hood controller to Fan VFD (0-10vdc)
- Outside air at 100%
- Cooling on with call from outdoor air thermostat at 75F adj.
- Compressor to modulate to maintain constant dew point temperature of 55F adj.
- Heating on with call from outdoor air thermostat at set point adj.
- Modulate heat to maintain set point adj.
- Modulating hot gas reheat to maintain discharge temperature

### **RTU-2 Only – Unoccupied Mode**

- During the unoccupied mode, the fan shall be disabled, and the economizer dampers shall be in the full closed position. The unit shall remain in the unoccupied mode until commanded by the “Hood On Input.”

### **RTU-1 Hood Off – Single-Zone VAV Simple Sequence**

- Outside air at minimum position set point adj.
- Cooling on with call from space thermostat
- In cooling only, fan to modulate to maintain space temperature of set point adj.
- Compressor to modulate to maintain constant discharge air temperature of 55F adj.
- First stage of cooling shall be outside air if available through enthalpy/dry bulb economizer – Repeated below
- Heating on with call from space thermostat
- In heating fan at 100%
- Modulate heat as required to maintain set point adj.
- Unoccupied mode to maintain space at 55 heating or 85 cooling adj.
- Discharge sensor controls compressor and gas heat

### **Economizer Operation**

- Enabled when outdoor air (OA) dry bulb temperature falls below the set point, less offset
- Economizer operation is disabled when the OA temperature rises above the set point plus offset.
- Economizer acts as first stage of cooling and controls to the cooling set point. If the economizer reaches 100% and the temperature is still above set point, mechanical cooling is allowed to stage up while the economizer is held at the full-open position.
- Economizer minimum position can be controlled with an EBTRON AFMS.
- Economizer damper is closed during unoccupied mode, except when unoccupied free cooling is used during night setback operation.

### **Unoccupied Mode**

- During the unoccupied mode, the fan shall be disabled, and the economizer dampers shall be in the full return position. The unit shall remain in the unoccupied mode until commanded to the warm-up, cool-down or occupied mode. (EMS, Thermostat, VAV)
- During the unoccupied heating mode, the supply fan shall be enabled. The economizer dampers shall remain in the full return position. The unit shall cycle the gas heat on to achieve the unoccupied heating set point.
- During the unoccupied cooling mode, the supply fan shall be enabled. The economizer dampers shall remain in the full return position unless outdoor air temperature conditions allow for free cooling. The unit shall cycle the cooling on to achieve the unoccupied cooling set point.