

**Sequence of Operation** Constant Volume AC Unit with a modulating OA damper, CV supply fan, two stage DX cooling, hot gas reheat, electric reheat, and a programmable stand-alone thermostat with built in humidity sensor.

**Local Schedule:** A local schedule internal to the controller is used to trigger the different occupancy levels of the controller. Coordinate with owner for programmable tstat occupied and unoccupied period.

**Occupied Mode:** During occupied mode, cooling and heating setpoints are used (adj. at thermostat).

**Unoccupied Mode:** During unoccupied periods, cooling and heating unoccupied setpoints are used (adj. at thermostat).

**Fan Mode Operation:** Supply Fan can be set to either automatic on demand or always on. The SF shall run continuously during occupied periods. During unoccupied period, fan shall cycle on calls for heating or cooling.

**Call for cooling:** The DX Cooling Stages / Compressor will operate according to demand.

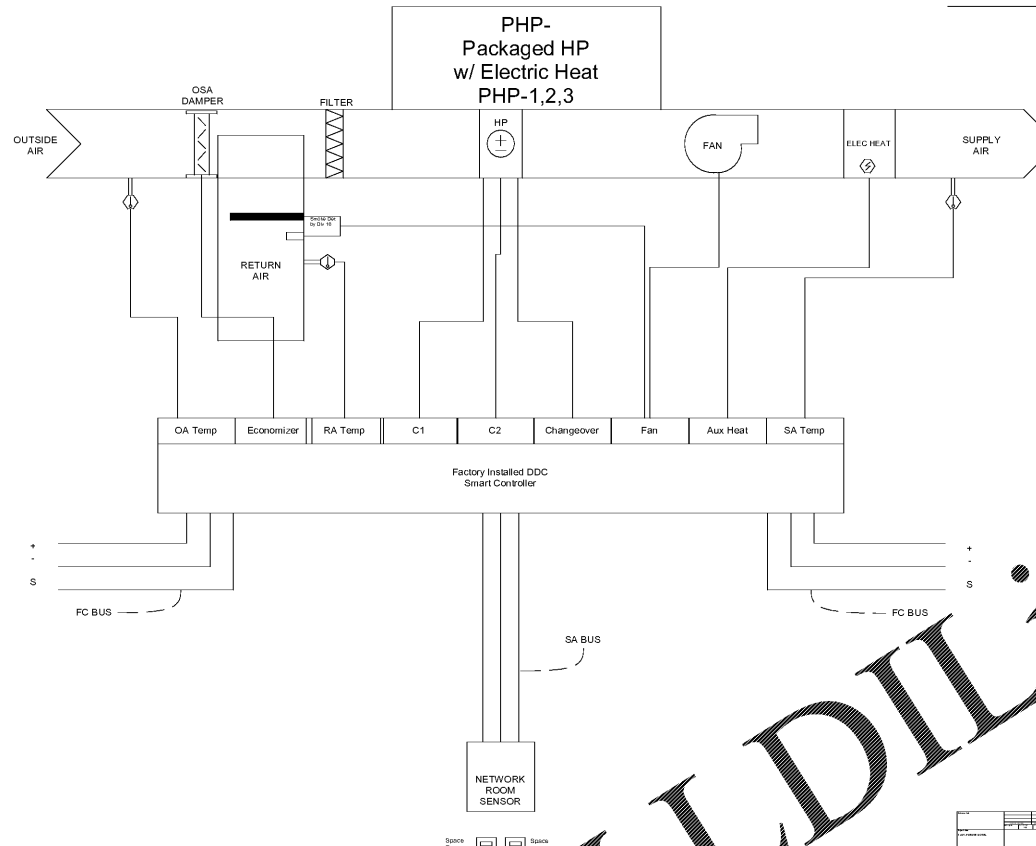
**Call for heating:** Electric heating stage(s) will operate according to demand. Dehumidification is not authorized on a call for heating.

**Outside Air Damper:** During occupied period, OA damper shall open. OA Damper to be adjusted by T&B contractor to achieve scheduled OA CFM. Upon unit shutdown, OA Damper shall close.

**Call for dehumidification:** Dehumidification is achieved with the cooling coil using the HGRH coil. Dehum. is only allowed during cooling mode. Dehumidification is disabled when room temp falls below the room low-ambient dehum. temperature.

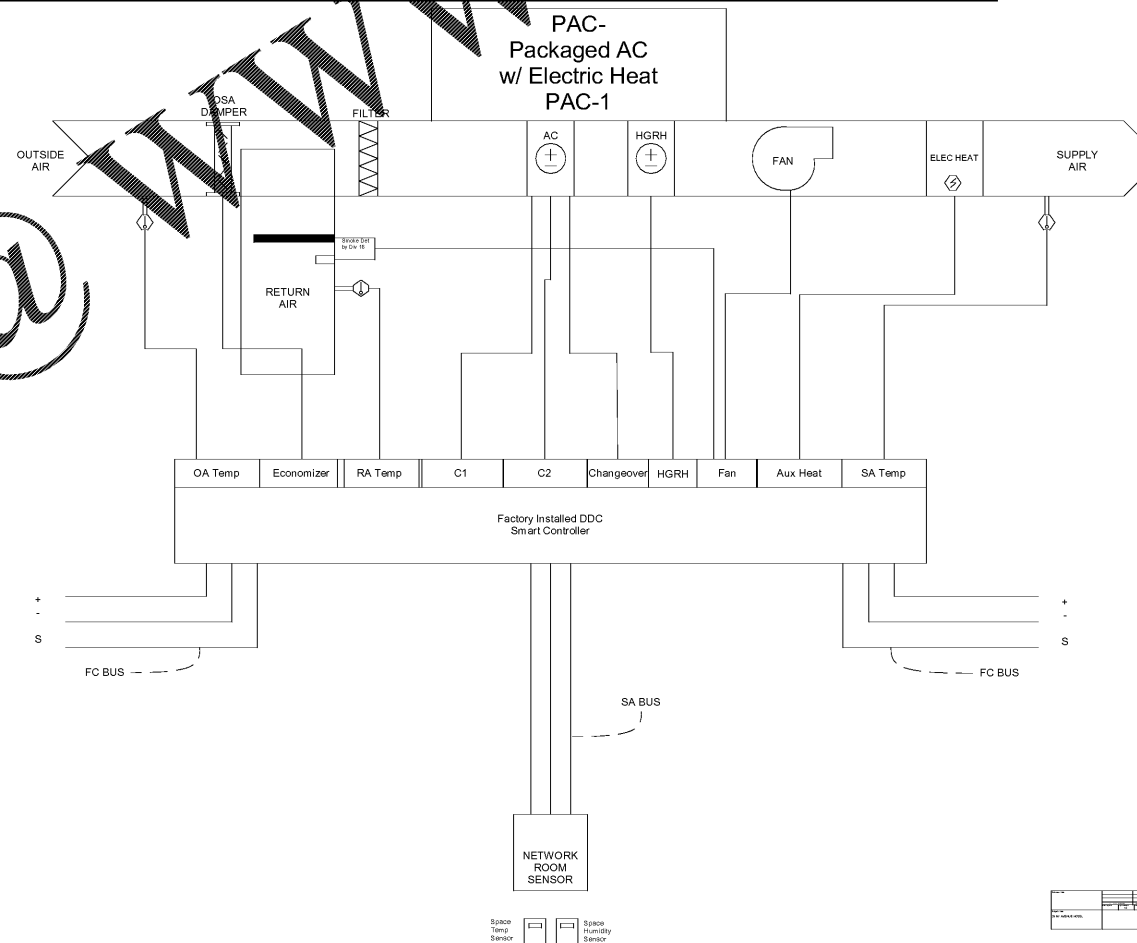
**Economizer Mode:** Whenever the outdoor air temperature reads 55 deg or below (adj.), the economizer dampers shall open to allow 100% OA to the space and the compressors will be locked out/off.

**Smoke Control:** Any time the smoke detector is activated, the unit shall be stopped through a hardwired interlock to the supply fan.



**TYPICAL PACKAGED HEAT PUMP CONTROL DIAGRAM**

NOT TO SCALE



**PACKAGED AIR CONDITIONING UNIT CONTROL DIAGRAM**

NOT TO SCALE

**Sequence of Operation:** Constant Volume heat Pump wait a modulating OA damper, CV supply fan, electric reheat, and a programmable stand-alone thermostat with built in humidity sensor.

**Local Schedule:** A local schedule internal to the controller is used to trigger the different occupancy levels of the controller. Coordinate with owner for programmable tstat occupied and unoccupied period.

**Occupied Mode:** During occupied mode, cooling and heating setpoints are used (adj. at thermostat).

**Unoccupied Mode:** During unoccupied periods, cooling and heating unoccupied setpoints are used (adj. at thermostat).

**Fan Mode Operation:** Supply fan can be set to either automatic on demand or always on. The SF shall run continuously during occupied periods. During unoccupied period, fan shall cycle on calls for heating or cooling.

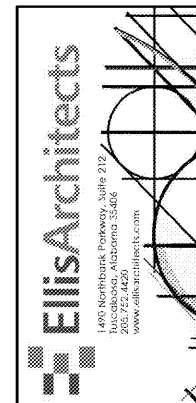
**Call for Cooling:** Reversing valve will index for cooling and compressor will operate accordingly.

**Call for Heating:** The reversing valve will index for heating and compressor will operate accordingly. Electric heat will operate as second stage. Dehumidification is not authorized on a call for heating.

**Outside Air Damper:** During occupied period, OA damper shall open. OA damper to be adjusted by T&B contractor to achieve scheduled OA CFM. Upon unit shutdown, OA damper shall close.

**Economizer Mode:** Whenever the outdoor air temperature reads 55 degrees or below (adj.), the economizer dampers shall open to allow 100% OA to the space and the compressors will be locked out/off.

**Smoke Control:** Any time the smoke detector is activated, the unit shall be stopped through a hardwired interlock to the supply fan.



New Construction for:  
**BIBB COUNTY COURTHOUSE ANNEX**  
8 Court Square West  
Centreville, Alabama



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Do Not Scale From Drawings.  
Contractor must verify all dimensions prior to construction.

JOB No. 18004

DOCUMENT DATE

BID SET: 09/06/2019

DRAWN BY: Author

MECHANICAL CONTROLS

**M1.2**