

AC Control Options Summary

		DESCRIPTION	Sensor Locations	Set Point Control Locations
Std	PCCA	Electronic multi-stage controller and cooling discharge air sensor. Separate cooling/heating change over control enables cooling or heating based on outdoor air dry bulb. Dedicated unit on/off switch. Optional heating controls are provided separately.	Downstream of Cooling Coil & Outside Air Inlet	Blower Section & Outside Air Inlet
Std	PCDA	Same as PCCA Standard except discharge air control is set to maintain leaving reheat temperature while providing continuous dehumidification. Dehumidification & cooling is disabled when mixed air dewpoint is below a nominal 55 F.	Downstream of Reheat Coil, Outside Air Inlet & Mixed Air Section	Blower Section, Outside Air Inlet & Mixed Air Section
CL50	Room Cooling/Heating Thermostat PCDA	Controls cooling based on zone setpoint input by enabling cooling discharge air control mode. If space cooling is satisfied, dehumidifier is enabled to continuously dehumidify and reheat space. Dehumidifier sequence is disabled below a nominal 55 F degree mixed air dewpoint. Space heating is based on zone setpoint input by enabling standard heating discharge air control.	Designed for Field Installation in Space	Space & Blower Section
CL47	Room Humidistat PCDA	Uses standard PCDA discharge air controls except zone relative humidity input enables or disables dehumidification reheat sequence. Dehumidification & cooling are disabled when mixed air dew point is below a nominal 55 F.	Field Installed in Space	Field Installed in Space
CL51 PCDA	Room Cooling/Heating Thermostat (Two stage) RH Control	Same as CL50 except CL47 option (humidistat) is combined with cooling 2 stage thermostat. 1st stage input enables cooling and dehumidifier (only if humidity is above set point). If 2nd stage cooling is enabled, dehumidifier and reheat sequence is disabled to provide useful cooling.	Designed for Field Installation in Space	Space & Blower Section
CL51 PCCA	Room Cooling/Heating Thermostat	Controls cooling based on zone setpoint input by enabling cooling discharge air control. Space heating is controlled based on zone setpoint input by enabling standard heating discharge air control.	Factory Design for Field Installation in Space	Space & Blower Section
CL48	Outside Air Temperature Override PCDA	Disables standard dehumidifier control sequence (PCDA) at high ambient conditions to allow useful sensible cooling.	Field Installed in Mixed Air Inlet	Mixed Air Inlet
DT4	Outside Air Enthalpy Control PCCA	Disables Mechanical Cooling (PCCA) based on low enthalpy and dew point. See Installation Manual for control curves.	Factory Installed in Mixed Air Inlet	Mixed Air Inlet
CN1	Heat/Vent/Cool Switch	Provides manual selection of unit operating modes (wall mount).	N/A	Field Installed in Space
RC Options	Remote Control & Indicator Console	Wall mounted 16 gauge console (stainless steel or plastic cover) which provides unit status (indicator lights), on/off control and remote damper adjustments.	N/A	Field Installed in Space

General Notes

- Zone Sensor control is not recommended for outside air changeovers greater than 6 ACH (exception: unoccupied conditions)
- Option CL50 is preferred for high outside air applications in humid climates (if useful space cooling is required). This option provides continuous dehumidification and reheat when mixed air conditions are above a nominal 55°F dewpoint. Reheat is disabled when space cooling is required
- Reznor Maps units are designed for high outside air applications. Economizer operation of PCDA includes free dehumidification when outdoor dew points are below a nominal 55°F. Due to the already high quantity of outside air, the addition of a traditional air side economizer package (for free cooling) is not typically warranted.
- Reznor recommends the use of discharge air control for high outside air applications. Typically discharge air is provided at near space setpoint (70° - 75°F). For adequate dehumidification, air is typically chilled to a nominal 55°F and heated to prevent space over cooling. However load variation and events in the space may be such that leaving unit conditions or unit operation must be adjusted for both outside and space loads (such as, variable outside air requirements). Contact your Reznor make up air specialist to assist in establishing other control sequences.