

## Controls

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### BASIC - RAB SERIES

#### Typical Specifications:

Thermostat shall provide control of room space for 2 or 4 pipe fan coil unit applications. Thermostat shall provide one control output sequence; two position, on/off control output. When wired for heating only, switch contact shall break open on increase in temperature. When wired for cooling application, thermostat switch shall make contact on increase in temperature. Thermostat shall have a set-point adjustment range of 50 to 85 °F [10 to 30 °C]. The set-point dial shall have a dual scale graduated in Fahrenheit and Celsius degrees. A fan selection switch will provide occupant control of three speed selections and includes an off position. Some models will provide a ventilation mode with fan running continuously regardless of load on thermostat. Switching differential is fixed at 1.8 °F [1.0 °C]. Thermostat must conform to UL 873. Thermostat shall not contain any mercury or other environmentally unfriendly metals or gas. Thermostat shall employ a gas vapor sensing switch. Tamper resistant, upper and lower limit stops shall be settable in two-degree increments.

### BASIC - RCC SERIES

#### Typical Specifications:

Controller shall provide temperature control of room space for 2 or 4 pipe fan coil unit applications. Controller shall have a set-point adjustment range of 50 °F to 85 °F [10 °C to 30 °C]. The set-point dial shall have a dual scale graduated in Fahrenheit and Celsius degrees. A fan selection switch will provide occupant control of three speed selections and includes a standby position. Some models will provide optional, return air sensing capabilities and a ventilation mode with fan running continuously regardless of load on controller. Switching differential is adjustable. Controller must conform to UL 873. Controller shall not contain any mercury or other environmentally unfriendly metals or gas. Controller shall employ a microprocessor-controlled output relay for operating valves. Tamper resistant, upper and lower limit stops shall be settable in two-degree increments.

#### Description:

Microprocessor-based room controllers for use in heating or cooling only and heating and cooling (2 pipe or 4 pipe) fan coil systems.

### BASIC - RDF SERIES

#### Typical Specifications:

Controller shall provide temperature control of room space for 2 or 4 pipe fan coil unit applications. Controller shall have a set-point adjustment range of 41 °F to 95 °F [5 °C to 35 °C]. The digital display shall provide temperature in Fahrenheit or Celsius degrees and be able to switch from set-point to room temperature (thermometer). A fan selection switch will provide occupant control of three speed selections and include a standby position. All models will provide a ventilation mode with fan running continuously regardless of load on controller. Switching differential or proportional band is adjustable. Controller must conform to UL 873. Controller shall not contain any mercury or other environmentally unfriendly metals or gas. Controller shall employ a microprocessor-controlled output relay for operating valves. Tamper-resistant, electronic upper and lower limit stops shall be settable in two-degree increments.

#### Description:

Microprocessor-based room controllers with digital display for use in heating or cooling only and heating and cooling (2 pipe or 4 pipe) fan coil systems.

### PCT-D SERIES

#### Typical Specifications

PCT-D – Price Controlling Thermostat – Dial for Fan Coil units.

The digital control package shall include a Dial thermostat, mounted in the occupied zone and an assembly consisting of a termination strip on the back for connection to heat, cool and fan accessories. The configurable PCT-D controller shall be a dedicated, standalone, flash microprocessor based, Proportional-Integral controller. The PCT-D controller shall be configurable in the field with computer software through the bottom service port. This will allow setup and balancing of the PCT-D and fan coil, without the need to access the ceiling or plenum space. It will include zone temperature sensor, remote or discharge temperature sensing, and set-point adjustment.

The PCT-D controller shall be used in a standalone operation. The thermostat service port (RJ12) shall allow for the connection of a personal computer via a custom USB interface. Connection at the service port will allow for the full display of all control parameters and Inputs/Outputs.

## Controls

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### PIC-FC SERIES

#### Typical Specifications

PIC-FC – Price Intelligent Controller for Fan Coils

The digital control package shall include an RJ45 connection back lighted LCD thermostat, mounted in the occupied zone and an assembly consisting of a transducer and termination board for connection to heat, cool and fan accessories. The control package shall also include a 35 ft plenum rated plug and play thermostat cable. The configurable PIC-FC controller shall be a dedicated, flash microprocessor based, Proportional-Integral controller mounted on the Fan Coil unit. The PIC-FC controller shall be configurable in the field with either the LCD thermostat or computer software. This will allow setup and balancing of the PIC-FC and fan coil, without the need to access the ceiling or plenum space. It will include zone temperature sensor, remote or discharge temperature sensing, and set-point adjustment.

#### BACnet Option:

Provide a BACnet module for networking with peer-to-peer Building Automation networked architecture (PIC-BAC). The BACnet module shall be field installable and be plug and play.

The PIC controller shall be used in either a standalone operation or a peer-to-peer Building Automation networked architecture. The BACnet expansion module with RS-485 network port will allow for plug in connection onto a BACnet MS/TP LAN. The thermostat Service Port (RJ12) shall allow for the connection of a personal computer via a custom USB interface. Connection at the service port will allow for the full display of all control parameters and Inputs/Outputs.

#### Thermostat options:

Provide an LCD Thermostat with integrated motion sensor, for room occupancy detection (PIC-TS-MOTION). This is provided in lieu of the standard LCD Thermostat.

Provide a Dial Thermostat with occupancy button (PIC-TS-DIAL). This is provided in lieu of the standard LCD Thermostat.

Provide a Room Sensor Thermostat with hidden dial adjustment to prevent set-point tampering (PIC-TS-SENS). This is provided in lieu of the standard LCD Thermostat.

Both LCD thermostats will allow setup and balancing of the PIC-FC controller, without need to access the ceiling or plenum space. It will include zone temperature sensor, set-point adjust, and character LCD display and a service port for computer access to the PIC-FC controller.