

The Phoenix Controls PTC Series Thermostats are specifically designed for room applications where constant volume valves are used and there is a need for local hydronic reheat control.

The product features a backlit LCD display with dedicated function menu keys for simple operation. Accurate temperature control is achieved with a Proportional Integral (PI) control algorithm, which virtually eliminates temperature drift associated with traditional, differential-based thermostats. Models are available for three point floating and analog 0 to 10 Vdc control. In addition remote room sensing is available.

All devices include a LonTalk® or BACnet® MS/TP network adapter.

All models contain a Single Pole, Single Throw (SPST) auxiliary switch that can be used to control lighting or auxiliary reheat. Three additional inputs are also provided for monitoring and/or various advanced functions.

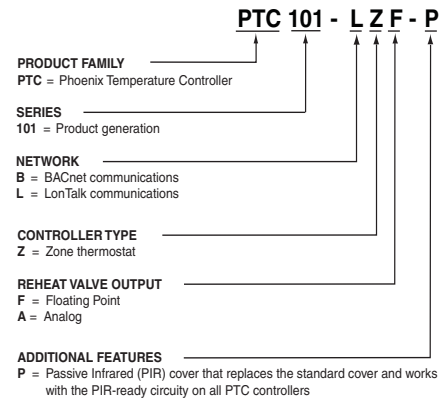
The thermostats are also compatible with a Passive Infrared (PIR) cover. Thermostats using the optional PIR cover provide advanced active occupancy logic, which will automatically switch occupancy levels from Occupied to Stand-By and Unoccupied as required by local activity being present or not. This advanced occupancy functionality provides advantageous energy savings during occupied hours without sacrificing occupant comfort.

FEATURES AND BENEFITS

Features	Benefits
Advanced occupancy functions	Through the network or smart local occupancy sensing — occupied, unoccupied, standby
Ready for PIR accessory cover	Fully integrated motion-detecting occupancy functionality with optional PIR accessory cover
Three configurable inputs: -BACnet: 2 floating point, 1 digital -LonMark: 2 analog, 1 digital	For remote timer, door-contact or occupancy trigger, heat/cool changeover functions
Pre-configured sequences of operation	Full Proportional Integral (PI) functionality to prevent short cycling, anticipate demand, and conserve energy
Configuration setup utility	Single interface to configure multiple devices
Lockable keypad	Tamper proof, no need for thermostat guards
Available for 24 Vac On/Off, Floating or Analog reheat control	Meets requirements for either type of reheat valve
Auxiliary output	Can be used for lighting or reheat
LonTalk or BACnet communications	Adds network integration functionality to map points to building management system
Pre-configured default values for stand-by setpoints and PIR timer settings	Simple plug and play operation



ORDERING GUIDE



RETROFIT UPGRADE

Existing standard PTCs can be upgraded to make use of the passive infrared (PIR) capability built into their circuitry. All that is required is a PIR cover to replace the existing standard one. The PIR cover accessory can be ordered as PTCACC-P.

SPECIFICATIONS

Power

24 Vac (19-30 Vac range), 50/60 Hz, 2 VA Class 2

Ambient Temperature

- Operating: 32-122 °F (-30-50 °C)
- Storage: -22-122 °F (-30-50 °C)

Humidity

0-95% RH non-condensing

Dimensions

4.94" H x 3.38" W x 1.13" D
(125 mm x 86 mm x 29 mm)

PIR Cover Power Requirement

5 Vdc current draw of 7 mA

Sensor

Local Passive Infrared Sensor

Shipping Weight

0.75 lb. (0.34 kg)

Wire Gauge

18 gauge maximum, 22 gauge recommended

Binary Inputs

Dry contact across terminal BI1, BI2 and UI3 to Scom

Contact Output Rating

- Triac output: 30 Vac, 1 Amp Maximum, 3 Amp in-rush
- Analog: 0 to 10 Vdc into 2k ohm resistance minimum

Temperature Sensor

Local 10 K NTC thermistor

Temperature Sensor Resolution

±0.2 °F (±0.1 °C)

Temperature Control Accuracy

±0.9 °F (±0.5 °C) @ 70°F (21 °C) typical calibrated

Occ, Stand-by and Unocc Cooling Set Point Range

54 to 100 °F (12 to 37.5 °C)

Occ, Stand-by and Unocc Heating Set Point Range

40 to 90 °F (4.5 to 32 °C)

Room and Outdoor Air Temperature Display Range

-40 to 122 °F (-40 to 50 °C)

Proportional Band for Room Temperature Control

Cooling and Heating: 3.2 °F (1.8 °C)

Regulatory Compliance



- RoHS
- FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

- EU Contact Address:

Honeywell GmbH
Boebling Str. 17
71101 Schoenaich
Germany

- UL 873 (US)
- Industry Canada (ICES-003)
- C-Tick (AS/NZS CISPR 22 Compliant)

