

TC-PAC01, TC-PHP01  
 TC-NAC01, TC-NHP01  
 TCSNAC01, TCSNHP01  
 Comfort™ Series Thermostat



## Product Data



A07051

Fig. 1 - Comfort Series Programmable Thermostat



A07050

Fig. 2 - Comfort Series Non-programmable Thermostat



A08613

Fig. 3 - Comfort Series Standard Screen Non-programmable

US patents: US20060165149 A1, USD582803 SI, USD582802 SI

The Carrier Comfort™ series of thermostats consists of programmable and non-programmable air conditioner and heat pump controls. These units feature non-mercury, non-lead based electronic controls built into a subtle, slim plastic enclosure.

### FEATURES/BENEFITS

#### Programmable and Non-Programmable Models

- Continuous display back-lighting configurable
- Auto changeover available
- Non-volatile memory to retain settings during a power outage
- Optional battery operation
- English/Metric units selection
- Keypad lockout
- RC / RH power compatible<sup>1</sup>
- Configurable setpoint limits

#### Programmable Models

- Touch·N·Go™ programmability
- 5-2 or All Days programmable
- 4 or 2 periods per day selectable

#### Air Conditioner Control

- 1-stage heat / 1-stage cool

#### Heat Pump Control

- 3-stage heat / 2-stage cool (TC-PHP01, TC-NHP01)
- 2-stage heat / 1-stage cool (TCSNHP01)

<sup>1</sup> Excludes standard screen

### PRODUCT DATA INFORMATION

#### Physical Characteristics

- Dimensions: See drawing
- Mounting: Vertical or horizontal J-box provisions for programmable models, horizontal J-box provisions for non-programmable

#### Electrical

- Input volts/amps: 24VAC, 3 VA, RC/RH compatible

#### Environment

- Operating temperature/Relative humidity: 32°F (0°C) to 104°F (40°C), 95% RH non-condensing
- Storage temperature/Relative humidity: -40°F (-40°C) to 134°F (57°C), 95% RH non-condensing

#### Wiring Requirements

- Standard 18 to 22 gauge, local wiring codes supersede.

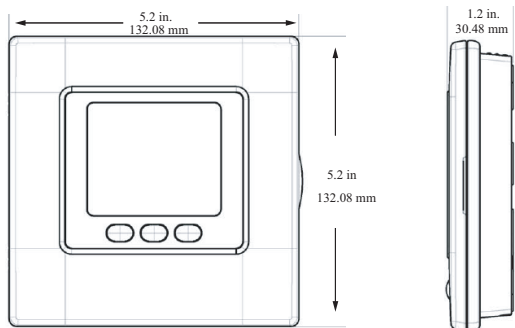
#### Accessories

PART NUMBER	DESCRIPTION
TX-LBP01	Large decorative backplate for TC-Pxx
TX-MBP01	Medium decorative backplate for TC-Nxx

## MODEL NUMBER NOMENCLATURE

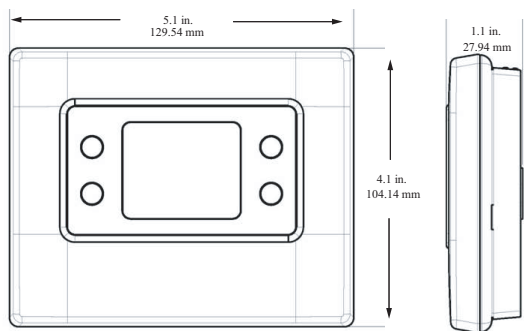
	1	2	3	4	5	6	7	8
	T	C	-	P	A	C	0	1
<b>Product</b> T = Thermostat					<b>Packaged Quantity</b> 01 = 1 piece			
<b>Series</b> C = Comfort					<b>Equipment Type</b> AC = Air conditioning HP = Heat pump			
<b>Screen</b> - = Large Screen S = Std. Screen					<b>Function Type</b> P = Programmable N = Non-programmable			

## DIMENSIONS



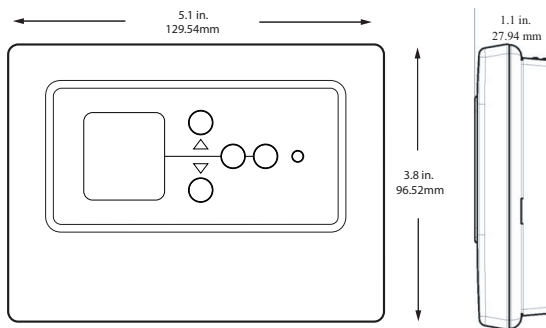
A07136

**Fig. 4 - Comfort Series Programmable Thermostat**



A07135

**Fig. 5 - Comfort Series Non-programmable Thermostat**



A08615

**Fig. 6 - Comfort Series Standard Screen Non-programmable**

## OPERATIONAL INFORMATION

### Heating / Cooling Setpoints

The heating/cooling setpoint range is from 50°F (10°C) to 90°F (32°C). A selectable range of 1-6° is enforced between heating and cooling desired temperatures. This is done by allowing one setting to “push” the other, to maintain this difference. (This difference is adjustable in Installer settings.)

### Five-minute Compressor Time Guard

This timer prevents the compressor from starting unless it has been off for at least 5 minutes. It can be defeated for 1 cycle by simultaneously pressing the FAN button and INCREASE TEMPERATURE (UP) button.

### Equipment On Indicators

When cooling equipment is ON, a COOL ON icon is displayed. When heating equipment is ON, a HEAT ON icon is displayed. When auxiliary heating is ON (HP only), an AUX HEAT icon is displayed.

### Auto Changeover

When Auto Changeover mode is selected, a change from heat to cool (or vice versa) will not occur until an opposite mode demand has existed for 20 minutes. When a setpoint is changed, Auto Changeover timing is ignored to allow the heating/cooling equipment to respond quickly. Auto Changeover mode can be disabled.

### Emergency Heat Mode

When the thermostat is controlling a heat pump and emergency heat is selected, all Y signals are locked out, and W becomes energized upon a call for heat.

### Smart Recovery (Programmable models)

With Smart Recovery selected, transition out of setback begins a fixed time period (Off, 30, 60, or 90 minutes selectable) before selected recovery time and gradually adjusts room temperature so that the desired temperature will be achieved at selected recovery time.

### Room Temperature Offset

Room temperature may be deliberately offset by up to 5° in either direction.



**Designed and Assembled  
in the USA.**