

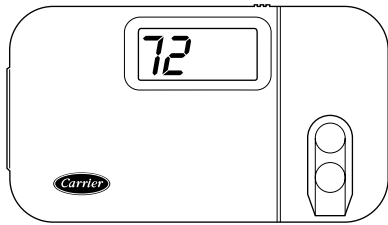


# Product Data

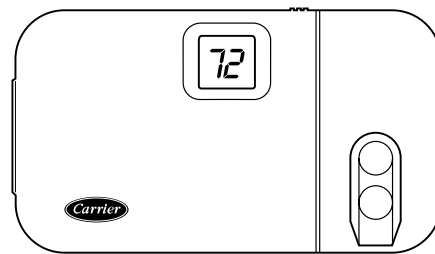
# TSTAT

## Thermostats Thermidistat™ Control

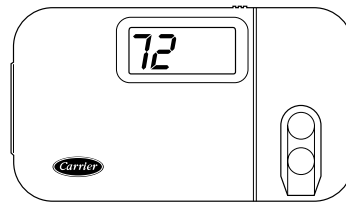
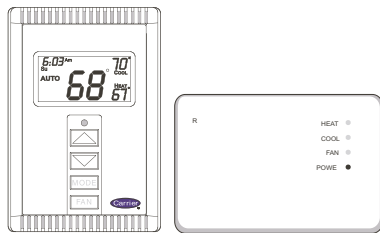
### THERMIDISTAT: INDUSTRY LEADING TEMPERATURE PLUS HUMIDITY CONTROL



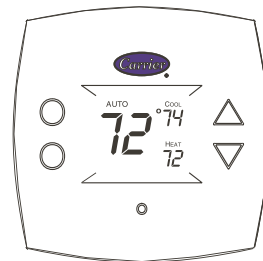
### DELUXE NON-PROGRAMMABLE THERMOSTATS



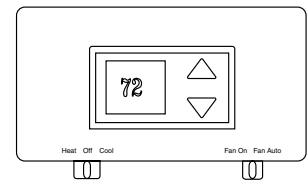
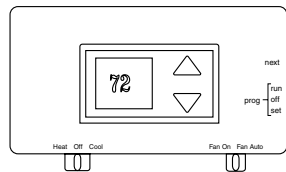
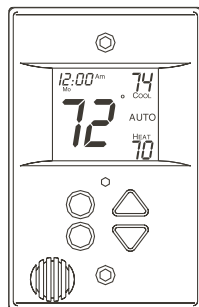
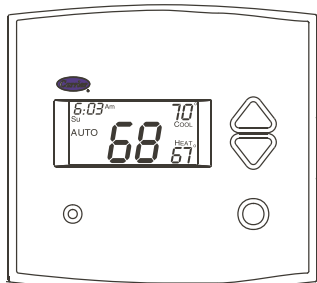
### PREMIUM PROGRAMMABLE THERMOSTATS



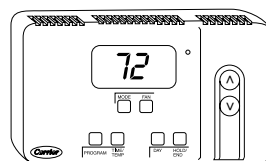
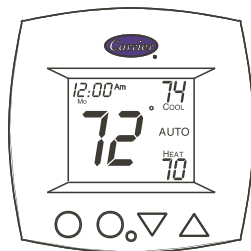
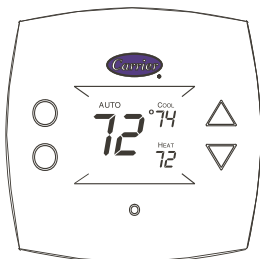
### STANDARD NON-PROGRAMMABLE THERMOSTATS



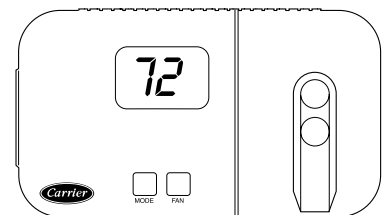
### DELUXE PROGRAMMABLE THERMOSTATS



### STANDARD PROGRAMMABLE THERMOSTATS



### BUILDERS NON-PROGRAMMABLE THERMOSTAT



The Carrier electronic thermostat product line consists of programmable and non-programmable air conditioner, heat pump, and 2-speed models; a programmable dual fuel model; and a programmable/non-programmable Thermidistat™ Control. Carrier also offers builder's and standard programmable thermostats in both air conditioner and heat pump models. These units feature non-mercury based electronic controls built into a subtle, slim plastic enclosure. They require no battery back-up.

## FEATURES/BENEFITS

### THERMIDISTAT CONTROL

The Thermidistat Control and include the above features plus:

- One model for heating/cooling
- Humidity display
- Humidify output for direct control of humidifier settings
- Dehumidify output for variable-speed blowers
- Vacation mode controls temperature and humidity while home is unoccupied
- Non-programmable set-up option
- Super Comfort Heat mode – when applied with 40FKA or FK4C Comfort Heat Package
- Dual Fuel Compatible
- Battery Free

### PREMIUM PROGRAMMABLE CONTROL FEATURES:

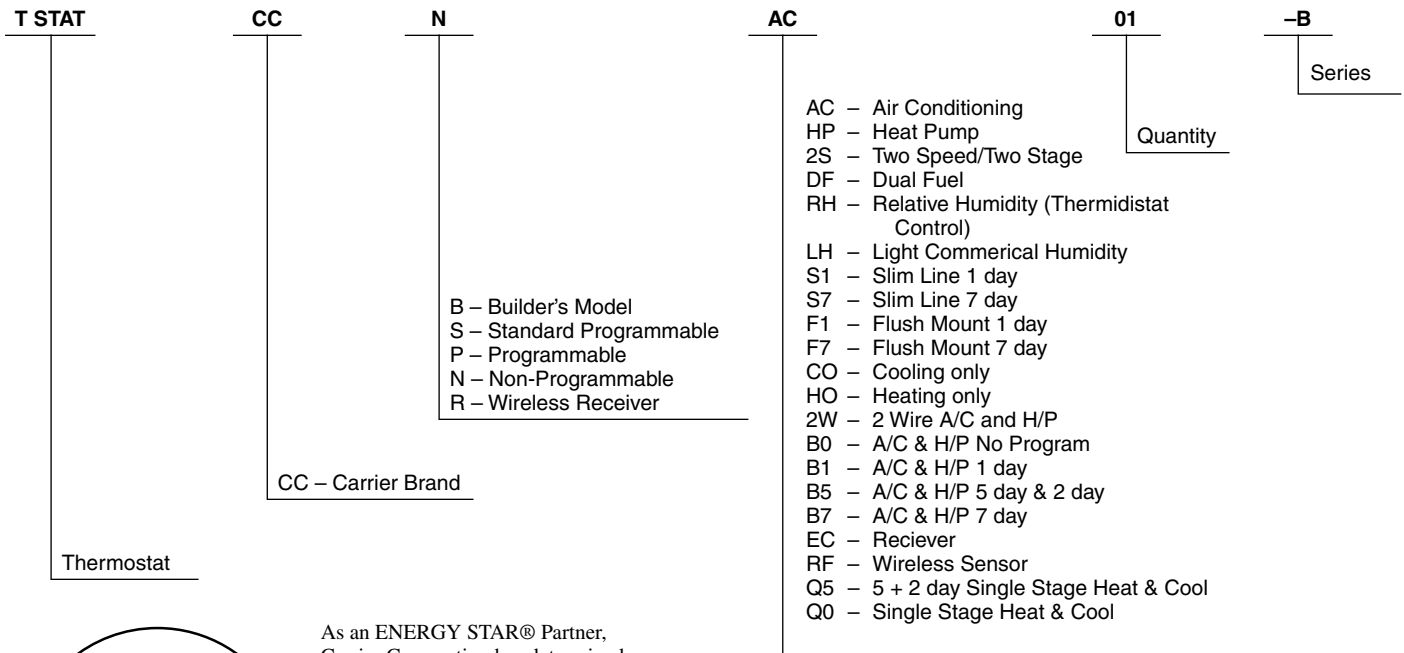
- Modes include OFF, COOL, HEAT, AUTO, and EHEAT (emergency heat on heat pump models only)
- Fan modes include ON and AUTO
- Equipment ON indicators
- Auto changeover available on all models (can be disabled)
- Liquid Crystal Display that displays current room temperature at all times, and desired temperature/programming prompts upon demand
- Backlighting for LCD upon demand
- Large, soft rubber pushbuttons with tactile action
- Non-volatile memory to retain setting during a power outage
- Two set points, 1 for heating and 1 for cooling
- Clean filter indicator (Time limit adjustable)
- Auxiliary heat indicator (Heat pump models only)
- Five minute compressor timeguard
- English/Metric (°F/°C) selection (Installer adjustable)
- Anticipator adjustment controls sensitivity, cycles per hour
- Seven day programming, with 4 time periods per day
- Hold function for temporarily

- overriding program schedule
- Outdoor temperature sensing (Optional)
- Copy function for ease of programming
- Auxiliary heat lock-out (Heat pump and dual fuel models using outdoor sensor)
- Fan activation--automatic fan with heat (Optional for packaged units)
- Residential installations eligible for financing through Retail Credit Program
- Room temperature sensor offset allows installer to deliberately offset indoor room temperature to accommodate homeowner's needs.
- Battery Free

### DELUXE PROGRAMMABLE CONTROL FEATURES:

- Modes include OFF, COOL, HEAT, AUTO, and EHEAT (emergency heat on heat pump models only)
- Fan modes include ON and AUTO
- Equipment ON indicators
- Auto changeover available on all models (can be disabled)
- Liquid Crystal Display that displays current room temperature at all times, and desired temperature/programming prompts upon demand

## Model number nomenclature



As an ENERGY STAR® Partner, Carrier Corporation has determined that the programmable thermostats and programmable Thermidistat Control meet the ENERGY STAR® guidelines for energy efficiency.



- Backlighting for LCD configurable for always on operation
- Large, soft rubber pushbuttons with tactile action
- Non-volatile memory to retain setting during a power outage
- Two set points, 1 for heating and 1 for cooling
- Clean filter indicator (Time limit adjustable)
- Auxiliary heat indicator (Heat pump models only)
- Five minute compressor timeguard
- English/Metric (°F/°C) selection (Installer adjustable)
- Anticipator adjustment controls sensitivity, cycles per hour
- Seven day programming, with 4 time periods per day
- Hold function for temporarily overriding program schedule
- Outdoor temperature sensing (Optional)
- Copy function for ease of programming
- Auxiliary heat lock-out (Heat pump and dual fuel models using outdoor sensor)
- Fan activation--automatic fan with heat (Optional for packaged units)
- Residential installations eligible for financing through Retail Credit Program
- Battery Free
- Room temperature sensor offset allows installer to deliberately offset indoor room temperature to accommodate homeowner's needs.
- Available in 1-Day Programmable configurations (Model # TSTATCCPS101 or TSTATCCPF101)

### **STANDARD PROGRAMMABLE CONTROL FEATURES**

- Rubber push buttons with tactile action
- Modes include HEAT, OFF, and COOL
- Fan modes include AUTO and ON
- Manual changeover
- Battery free
- Mercury free
- English/Metric selection
- Temperature sensor offsets
- Large display
- Battery Free
- Power Stealing option available on AC models only

- Available in 1-Day Programmable configurations (Model # TSTATCCPB101)

### **DELUXE NON-PROGRAMMABLE CONTROL FEATURES**

- Modes include OFF, COOL, HEAT, AUTO, and EHEAT (emergency heat on heat pump models only)
- Fan modes include ON and AUTO
- Equipment ON indicators
- Auto changeover available on all models (can be disabled)
- Liquid Crystal Display that displays current room temperature at all times, and desired temperature/programming prompts upon demand
- Backlighting for LCD upon demand
- Large, soft rubber pushbuttons with tactile action
- Non-volatile memory to retain setting during a power outage
- Two set points, 1 for heating and 1 for cooling
- Clean filter indicator (Time limit adjustable)
- Auxiliary heat indicator (Heat pump models only)
- Five minute compressor timeguard
- English/Metric (°F/°C) selection (Installer adjustable)
- Anticipator adjustment controls sensitivity, cycles per hour
- Outdoor temperature sensing (Optional on all models except non-programmable AC)
- Auxiliary heat lock-out (Heat pump and dual fuel models using outdoor sensor)
- Fan activation--automatic fan with heat (Optional for packaged units)
- Residential installations eligible for financing through Retail Credit Program
- Room temperature sensor offset allows installer to deliberately offset indoor room temperature to accommodate homeowner's needs.
- Battery Free

### **STANDARD NON-PROGRAMMABLE CONTROL FEATURES**

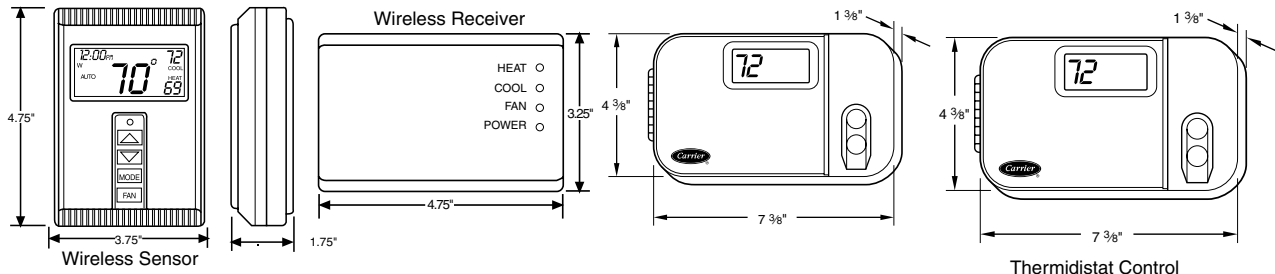
- Modes include OFF, COOL, HEAT, AUTO, and EHEAT (emergency heat on heat pump models only)
- Fan modes include ON and AUTO

- Equipment ON indicators
- Auto changeover available on all models (can be disabled)
- Liquid Crystal Display that displays current room temperature at all times, and desired temperature/programming prompts upon demand
- Backlighting for LCD configurable for always on operation
- Large, soft rubber pushbuttons with tactile action
- Non-volatile memory to retain setting during a power outage
- Two set points, 1 for heating and 1 for cooling
- Clean filter indicator (Time limit adjustable)
- Auxiliary heat indicator (Heat pump models only)
- Five minute compressor timeguard
- English/Metric (°F/°C) selection (Installer adjustable)
- Anticipator adjustment controls sensitivity, cycles per hour
- Outdoor temperature sensing (Optional on all models except non-programmable AC)
- Auxiliary heat lock-out (Heat pump and dual fuel models using outdoor sensor)
- Fan activation--automatic fan with heat (Optional for packaged units)
- Residential installations eligible for financing through Retail Credit Program
- Room temperature sensor offset allows installer to deliberately offset indoor room temperature to accommodate homeowner's needs.
- Battery Free

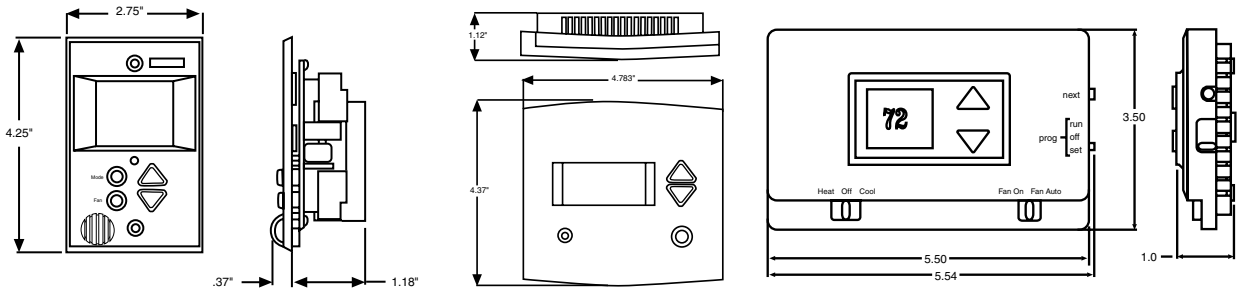
### **BUILDERS NON-PROGRAMMABLE CONTROL FEATURES**

- Rubber push buttons with tactile action
- Modes include HEAT, OFF, and COOL
- Fan modes include AUTO and ON
- Manual changeover
- Battery free
- Mercury free
- English/Metric selection
- Temperature sensor offsets
- Large display
- Power Stealing option available on AC models only

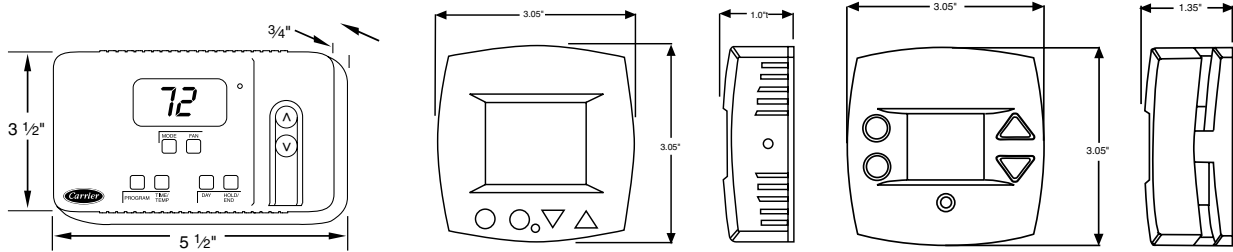
# Dimensions



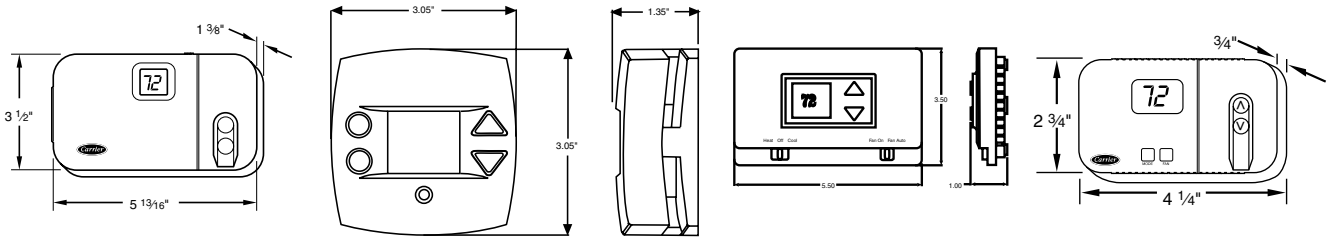
Premium Programmable Thermostat Controls



Deluxe Programmable Thermostat Controls



Standard Programmable Thermostat Controls



Deluxe Non-Programmable Thermostat Controls

Standard Non-Programmable Thermostat Control

Builder's Model Thermostat Control

# Product data information

## Physical Characteristics

Premium, Deluxe, Standard Programmable; Deluxe, Standard Non-Programmable:  
Dimensions: See drawing  
Appearance: Plastic, eggshell color, textured  
Builder's/Standard Programmable Models:  
Dimensions: See drawing  
Appearance: Plastic, designer white, textured, white, grey rubber push buttons

## Electrical Characteristics

Premium, Deluxe, Standard Programmable; Deluxe, Standard Non-Programmable:  
Input Volts/Amps: 24vac, 5 VA  
Builder's/Standard Programmable Models:  
Input Volts/Amps: 24vac, 1 VA

## Environmental Requirements:

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 (56°C), 95% rh non-condensing

## Program Specifications:

Premium, Deluxe Programmable Models:  
Temperature set point range: 40°F (4°C) to 90°F (32°C)  
Separate heat and cool set points  
Auto changeover—can be disabled  
Clean filter reminder: installer adjustable  
Permanent memory  
Programming days: 7 day  
Programming periods: 4—Wake, Day, Eve, Sleep  
Hold function  
Copy previous day function  
Humidity display and control (Thermidistat Control only)  
Equipment On indicator (Thermidistat Control only)  
Vacation Programming

Standard Programmable Models:  
Temperature set point range: 50°F (10°C) to 90°F (32°C)  
Manual changeover  
Non-volatile memory  
Fahrenheit or Celsius selectable  
Power-stealing option on AC model only  
Selectable fan ON or OFF with auxiliary heating (HP model)  
Five-minute compressor timeguard  
Four cycles per hour maximum  
Auxiliary heat LED on heat pump models  
5 & 2 day programming

Deluxe, Standard, Builder's Non-Programmable Models:  
Temperature set point range: 40°F (4°C) to 90°F (32°C)  
Separate heat and cool set points  
Auto changeover—can be disabled  
Clean filter reminder: installer adjustable  
Permanent memory  
Equipment On indicator

## Wiring Requirements:

Power: 24vac nominal, 18- to 30-vac, 50/60 Hz  
Wiring: Standard 18 to 22 gage.

# Description

## THERMIDISTAT CONTROL

PART NO.	DESCRIPTION
TSTATCCPRH01-B	Thermidistat Control – Non-Programmable/Programmable Thermostat with Humidity Control. (For use in Dual Fuel, AC, HP, and 2S applications. Includes Outdoor Air Temperature Sensor.)

## PREMIUM PROGRAMMABLE THERMOSTATS

PART NO.	DESCRIPTION
TSTATCCPRF01	Thermostat, Auto Changeover, 7-Day Programmable, °F/°C, Wireless Transmitter with range up to 500 ft.
TSTATCCREC01	Wireless Receiver.
TSTATCCPAC01-B	Thermostat, Auto Changeover, 7-Day Programmable, °F/°C, 1-Stage Heat/1-Stage Cool
TSTATCCPHP01-B	Thermostat, Auto Changeover, 7-Day Programmable, °F/°C, 2-Stage Heat/1-Stage Cool
TSTATCCP2S01-B	Thermostat, Auto Changeover, 7-Day Programmable, °F/°C, 2-Stage Heat/2-Stage Cool in AC Mode, 3-Stage Heat/2-Stage Cool in HP Mode
TSTATCCPDF01-B	Dual Fuel Thermostat, Outdoor Temperature Sensor included

## DELUXE PROGRAMMABLE THERMOSTATS

PART NO.	DESCRIPTION
TSTATCCPS101	Thermostat, Auto Changeover, single Day programmable, Slimline Style
TSTATCCPS701	Thermostat, Auto Changeover, 7-day programmable, Slimline Style
TSTATCCPF101	Thermostat, Auto Changeover, single day programmable, Flushmount style
TSTATCCPF701	Thermostat, Auto Changeover, 7-day programmable, Flushmount style
TSTACCPQ501	Thermostat, Auto Changeover, 7-day prog, Slimline Style

## STANDARD PROGRAMMABLE THERMOSTATS

PART NO.	DESCRIPTION
TSTATCCSAC01	Thermostat, Manual Changeover, 5-2 Day Programmable, °F/°C, 1-Stage Heat/1-Stage Cool
TSTATCCSHP01	Thermostat, Manual Changeover, 5-2 Day Programmable, °F/°C, 2-Stage Heat/1-Stage Cool
TSTATCCPB101	Thermostat, Programmable, F/°C, simple 1 day programmable, T2 style
TSTATCCPB501	Thermostat, 5 +2 day programmable, Super T2 style, F/°C
TSTATCCP2W01	Thermostat, Programmable, 2-wire, 7-day program schedule, Copy, Vacation, Super T2 style

## DELUXE NON-PROGRAMMABLE THERMOSTATS

PART NO.	DESCRIPTION
TSTATCCNAC01-B	Thermostat, Auto Changeover, Non-Programmable, °F/°C, 1-Stage Heat/1-Stage Cool
TSTATCCNHP01-B	Thermostat, Auto Changeover, Non-Programmable, °F/°C, 2-Stage Heat/1-Stage Cool

## STANDARD NON-PROGRAMMABLE THERMOSTATS

PART NO.	DESCRIPTION
TSTATCCNB001	Thermostat, Non-programmable, F/°C, 1-Stage Heat/1-Stage Cool, T2 style
TSTATCCN2W01	Thermostat, Non-programmable, 2-Wire, heat only or cool only, F/°C, T2 style
TSTATCCNQ001	Thermostat, Auto Changeover, N-P, °F/°C, 1-Stage Heat/1-Stage Cool, battery or 5 wire

## BUILDERS NON-PROGRAMMABLE THERMOSTATS

PART NO.	DESCRIPTION
TSTATCCBAC01-B	Thermostat, Manual Changeover, Non-Programmable, °F/°C, 1-Stage Heat/1-Stage Cool
TSTATCCBHP01-B	Thermostat, Manual Changeover, Non-Programmable, °F/°C, 2-Stage Heat/1-Stage Cool

# Thermostat accessories

PART NO.	DESCRIPTION
TSTATXXSEN01-B*	Outdoor Air Temperature Sensor
TSTATXXNBP01†	Backplate for Non-Programmable Thermostat
TSTATXXPBP01†	Backplate for Programmable Thermostat and Thermidistat Control
TSTATXXBBP01†	Backplate for Builder's Model Thermostat
TSTATXXSBP01†	Backplate for Standard Programmable Thermostat
TSTATXXCNV10‡	Thermostat Conversion Kit (4 to 5 Wire) — 10 Pack

\* Outdoor temperature sensor is an accessory for all Carrier electronic thermostats, except the non-programmable air conditioner version and builder's and Standard Programmable model thermostats. It allows the temperature at a remote location (outdoors) to be displayed on the thermostat.

The outdoor air temperature sensor *must be* used with the dual fuel thermostat.

The outdoor air temperature sensor is included with the Thermidistat Control and dual fuel thermostat.

† This plate is designed to cover surrounding wall area located behind thermostat.

‡ Thermostat conversion kit is a 24-vac accessory that can turn a 4-wire thermostat application into a 5-wire application. This kit can also be used to replace a broken thermostat wire, or add an extra wire when needed. Do not use this kit with the AC model of the Builder's or Standard Programmable thermostat.

# Operational information

## Five-minute compressor timeguard

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 mode button and INCREASE TEMPERATURE (UP) button.

## Heat/Cool set points (desired temperature)

A minimum difference of 2° is enforced between heating and cooling desired temperatures. This is done by allowing one setting to “push” the other, to maintain this difference. (Thermostat Control is adjustable.) Builder’s thermostats are controlled by a single set point.

## Equipment on indicators (Non-Programmable models)

When cooling equipment is ON, a COOL ON icon is displayed above the room temperature display. When heating equipment is ON, a HEAT ON icon is displayed above the room temperature display.

## Equipment on indicators (Thermostat Control)

When cooling equipment is ON, a COOL icon preceded by a small triangle is displayed below the cool set point. While cooling equipment turn on is delayed by a staging or cycle timer, the triangle and the word COOL will flash. The same is true for the HEAT icon and its preceding triangle located under the heat set point. The 2 triangles are also used to indicate the state of the humidify and dehumidify outputs. See next section.

## Humidify/dehumidify output on indicators (Thermostat Control)

Within humidity select screen (selected by Humidity button and indicated by “hu” or “dhu” on clock display), the triangle under humidity set point will be on while humidify output is on. The triangle under dehumidify set point will be on while dehumidify output is active (turned off, because this output is reverse logic).

## 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. If set point is changed, the 20 minute requirement is deleted. Auto changeover mode can be disabled. Builder’s and Standard Programmable thermostats are manual changeover.

## Emergency heat mode

When 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 before selected recovery time and gradually adjusts room temperature so that the desired temperature will be achieved at selected recovery time.

## Room Temperature Offset (All models)

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

## Maximum On/Off Deadband

Maximum sensed temperature difference between ON and OFF is 0.8°F for Builder’s thermostats and 0.6°F for all other models.

