# CTC-1611/1612



# **One-Pipe, Pneumatic, Room Thermostats**

## **Description and Application**

These single-setpoint, one-pipe thermostats are designed for proportional control of pneumatic valve and damper actuators used in HVAC systems. A highly sensitive bimetal element with feedback is used for accuracy and stability.

Models are available for direct or reverse acting proportional action. The throttling range is factory set and field adjustable. Setpoints are adjusted using sliders which can be locked or limited using setpoint stops (HFO-0027).

The thermostats require a scale plate assembly, cover, and an external 14.4 scim restrictor in the supply line. See the Accessories section for a variety of options.

### **Features**

- Sensitive bimetal element provides consistent, accurate feedback
- Direct or reverse acting proportional control of valve or damper actuators (see the Models section)
- Field-adjustable throttling range

### Models

CTC-1611	Direct acting
CTC-1612	Reverse acting





(Shown with Horizontal Scale Plate and Light Almond Cover Installed)

# **Specifications**

Setpoint Range	55 to 85° F (13 to 29° C)
Throttling Range	3° to 12° F (1.7° to 6.7° C) factory set @ 3° F, field adjustable up to 12° F
Calibration	9 psi (62 kPa) branch pressure
Air	
Supply Pressure	20 psi (138 kPa), 30 psi (207 kPa) maximum, supplied through a 14.4 scim (3.9 mL/s) restrictor sold separately
Output Capacity	14.4 scim or less when using a proper restrictor
Consumption	14.4 scim or less when using proper restrictor
Material	Black flame-retardant plastic
Weight	3 oz. (85 grams)
<b>Temperature Limits</b>	
Operating	40° to 120° F (4° to 49° C)
Shipping	–40° to 140° F (–40° to 60° C)

### Accessories

## **Dimensions and Details**

All dimension are in inches (mm)

**Backplate kit** (allows thermostat to be mounted to 2x4 handy box, includes 2 #6-32 screws and decorative matching 2.75 x 4.5" plate):

HMO-5024	Light almond w/ aluminum trim
HMO-5026	White w/ aluminum trim
HMO-5030	Light almond
HMO-5031	White

Thermostat **scale plates** (includes 2 each HPO-0046 scale plate pins):

° F, horizontal
° F, vertical
° C, horizontal
° C, vertical

#### Thermostat covers, blank:

HPO-1501	Light almond ABS plastic
HPO-1502	White ABS plastic
HPO-1503	Brushed aluminum

#### Thermostat **covers**, **full window**:

HPO-1511	Light almond ABS plastic
HPO-1512	White ABS plastic
HPO-1513	Brushed aluminum

### Miscellaneous accessories:

HFO-0027	Setpoint stop strip, 4 "stops" per strip
HFO-0028	Tubing kit, 3/32" ID
HMO-5023	Mounting strap for mounting on hollow walls, includes 2 #6- 32 x 2" screws and "template" printed on envelope
HPO-0044	Replacement thermostat cover screws
HPO-0046	Replacement scale plate pins
HPO-1320	Replacement label strip (1 fur- nished with each cover), 3 labels per strip (for day/night, sum- mer/winter or heating/cooling

indication)

#### SETPOINT CALIBRATION SCALE PLATE 1/16" ALLEN WRENCH $\cap$ 0 ..... **COVER SCREWS (2)** GAGE TAP SETPOINT SCALE PLATE INDICATOR **RETAINING PINS (2) BACK VIEW** 1.31/32" (50) Œ MTG. HOLES (2) 0 63/64" T1 (25) 2-9/16 (65)Cover



# **A** CAUTION

Pneumatic devices must be supplied with clean, dry control air. Any other medium (e.g., oil or moisture contamination) will cause the device to fail.

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