# T498A,B Electric Heat Thermostats

### **PRODUCT DATA**



# GENERAL

The T498A,B Electric Heat Thermostats provide line voltage control of electric heating equipment. A snap action switch makes heating circuit on temperature fall.

### **FEATURES**

- CSA Performance Certifled at 16A.
- CSA Certified, Underwriters Laboratories Inc. Listed up to 5 kW at 277 Vac.
- Long life, industrial-grade Micro Switch™ mechanism.
- Rugged, engineering plastic mounting base with captive mounting screws.
- Replaces any standard wall-mounted electric heat thermostat.
- · Classic beige styling.
- Range: 40°F to 80°F (5°C to 25°C).
- Locking cover and range stops are optional.
- Energy efficient and economical.

#### **Contents**

General	
Features	
Specifications	2
Ordering Information	
Installation	
Setting and Checkout	4
Security Features	4
Calibration	



### **SPECIFICATIONS**

#### **IMPORTANT**

The Specifications given in this publication do not include normal manufacturing tolerances. Therefore, this unit may not exactly match the listed specifications. Also, this product is tested and calibrated under closely controlled conditions, and some minor differences in performance can be expected if those conditions are changed. For exact engineering specifications, contact your Honeywell sales representative.

#### Models:

T498A: Makes heating circuit on temperature fall. With setting knob on extreme counterclockwise position, provides single line break—spst (see Fig. 2).

T498B: Makes heating circuit on temperature fall. With setting knob at OFF position, provides double line break for fuse protected 240V heating circuits (see Fig. 3). Remakes circuit no higher than -31°F (-35°C) in OFF position. Both models available with a thermometer located in the cover to indicate the actual room temperature.

#### **Setting Range:**

40°F to 80°F, markings every 5°F.

#### Type of Switching:

Fully enclosed snap acting Micro Switch™.

T498A: Single line break (spst).

T498B: Spst with double line break (dpst in OFF position).

#### **Wiring Connections:**

Six inch (150 mm) stranded copper leadwires suitable for connecting to aluminum wiring if approved special service CO/ALR connectors are used. Color-coded Black to LI (T498A,B); Red to L2 (T498B only).

#### **Electrical Rating (Noninductive (resistive) rating):**

22A noninductive at 120/208/240 Vac.

19A noninductive at 277 Vac.

#### **CSA Performance Certification:**

16A at 208/240 Vac.

#### **Setpoint Adjustment:**

Control knob on face of thermostat.

#### **Sensing Element:**

Flat bimetallic blade.

#### Differential:

Approximately 3°F (2°C) nonadjustable.

#### **Dimensions:**

See Fig. 1 for nominal dimensions.

#### Thermometer:

Optional coil bimetal 50°F to 90°F (10°C to 30°C).

#### **Mounting Means:**

Direct mounting on NEMA standard vertical 2 x 4 inch (50 mm x 100 mm) switch box, or 4 x 4 inch (100 mm x 100 mm) box with mud ring adapter (not provided) using 6-32 slotted Robertson<sup>TM</sup> screws.

#### Approval:

Underwriters Laboratories Listed: File No. E47434, Guide No. XAPX.

CSA: File No. LR1322

#### Accesories (Not Included):

272804A Range Stop and Locking Screws Assembly: Includes locking cover screws, Tinnerman clips, wrench, and range stops—two plastic pins to insert inside cover for field-selection of minimum and maximum temperature settings.

272805H Replacement Cover Assembly: For T498B Fahrenheit beige models (manufactured after November, 1993—date coded after 9345).

## **ORDERING INFORMATION**

When purchasing replacement and modernization products from your TRADELINE® wholesaler or distributor, refer to the TRADELINE® Catalog or price sheets for complete ordering number, or specify:

- 1. Order Number.
- 2. Switching.

- 3. Accessories, if desired.
- Order additional system components and system accessories separately.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

- 1. Your local Home and Building Control Sales Office (check white pages of your phone directory).
- Home and Building Control Customer Relations Honeywell, 1885 Douglas Drive North Minneapolis. Minnesota 55422-4386

In Canada—Honeywell Limited/Honeywell Limitée, 35 Dynamic Drive, Scarborough, Ontario M1V 4Z9. International Sales and Service Offices in all principal cities of the world. Manufacturing in Australia, Canada, Finland, France, Germany, Japan, Mexico, Netherlands, Spain, Taiwan, United Kingdom, U.S.A.

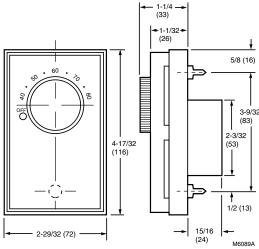


Fig. 1. Nominal dimensions in in. (mm).



## RECYCLING NOTICE

If this control is replacing a control that contains mercury in a sealed tube, do *not* place your old control in the trash.

Contact your local waste management authority for instructions regarding recycling and the proper disposal of any control containing mercury in a sealed tube.

- Leave the cover on the thermostat while making connections.
- Push the leadwires into the outlet box and insert the thermostat into the box for mounting by pushing against the cover.
- 3 Remove the thermostat cover by grasping the top and bottom edges and pulling outward.
- Turn the dial so that the setpoint indicator is at the 12 o'clock position. This will prevent accidental damage to the dial stop during mounting.
- Using a screwdriver, secure the thermostat to the outlet box by tightening the two mounting screws. Handle the thermostat with care; excessive pressure can damage the control knob or sensing element.



## **CAUTION**

- Disconnect power supply before making wiring connections to prevent electrical shock or equipment damage.
- All wiring must comply with applicable codes and ordinances.
- 3 Thermostats are designed to be used with a separate limit control in the appliance.
- Using wire connectors approved for No. 12 wires, make line voltage wiring connections directly to the leadwires installed on the thermostat.



## CAUTION

If connecting with aluminum conductors, use approved CO/ALR solderless wire connectors to avoid fire hazard.

### INSTALLATION



# **WARNING**

# HIGH VOLTAGE CONTROL. ELECTRICAL SHOCK HAZARD.

This thermostat is a line voltage (120 to 277 volt) control. Do not install this thermostat if you are not completely familiar and competent with electrical wiring. If improperly handled, there can be risk of 120 to 277 volt electric shock hazard that can cause serious injury or death.

#### Location

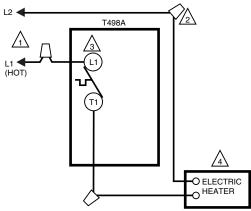
Install a vertical outlet box that is used to mount the T498, four to five feet (1.5m) above the floor on an inside wall where the thermostat will be subjected to average room temperature.

Mount the thermostat away from concealed warm or cold water pipes, warm air ducts, light switches and dimmers, refrigerators or drafts from hallways, fireplaces, stairways or fans.

## **Mounting and Wiring**

When replacing an old line voltage electric heating thermostat, remove the old thermostat carefully to avoid damaging the insulation on the wiring.

Check the old insulation for cracks, nicks, or fraying and apply approved electrical tape where necessary to achieve adequate insulation, or replace the wires using approved methods.



POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

USE SPECIAL SERVICE CO/ALR SOLDERLESS CONNECTORS WHEN CONNECTING ALUMINUM CONDUCTORS OR A FIRE HAZARD MAY RESULT.

∆ BREAKS AND REMAKES BELOW -31°F(-35°C); NORMALLY THERMALLY ACTIVATED. BREAKS ON A TEMPERATURE RISE; MAKES ON A TEMPERATURE FALL.

4 USE A SEPARATE LIMIT CONTROL IN THE HEATING APPLIANCE. M6091 $^{\prime}$ 

Fig. 2. Typical hookup for T498A Thermostat.