

T410A,B Electric Heat Thermostats

PRODUCT DATA



FEATURES

- Energy efficient and economical.
- UL listed up to 5 kW at 277 Vac.
- Includes long-lasting Micro Switch™ mechanism.
- Rugged, plastic mounting base; one-piece cover.
- Contemporary white finish complements any decor.
- Replaces virtually any wall-mounted electric heating thermostat.

GENERAL

The T410A,B Electric Heat Thermostats provide line voltage control of electric heating equipment. Snap-action switch makes heating circuit on temperature fall.

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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:

- T410A Electric Heating Thermostat: Spst switching; heating circuit makes on temperature fall.
- T410B Electric Heating Thermostat: Dpst switching; makes double line break with setting dial at OFF position; heating circuit makes on temperature fall.

Electrical Ratings (Noninductive Resistive Rating):

22A at 120/208/240 Vac; 19A at 277 Vac.

Wiring Connections:

6 in. (150 mm) copper leadwires, suitable for connecting to aluminum wiring if approved CO/ALR solderless wire connectors are used.

Sensing Element:

Bimetal.

Setpoint Adjustment:

Setting dial on the face of the thermostat.

Temperature Range:

40° to 80°F (5° to 25°C).

Differential:

3°F (2°C), nonadjustable.

Switching:

Micro Switch snap-acting switch.

Mounting:

Mounts directly on NEMA standard 2 x 4 in. vertical outlet box, or 4 x 4 in. outlet box if used with ring adapter (ordered separately), using 6-32 Robertson slotted screws.

Dimensions:

See Fig. 1.

Approvals:

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

Canadian Standards Association Certified: File No. LR1322.

Accessory:

272804A Range Stop and Locking Cover 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.

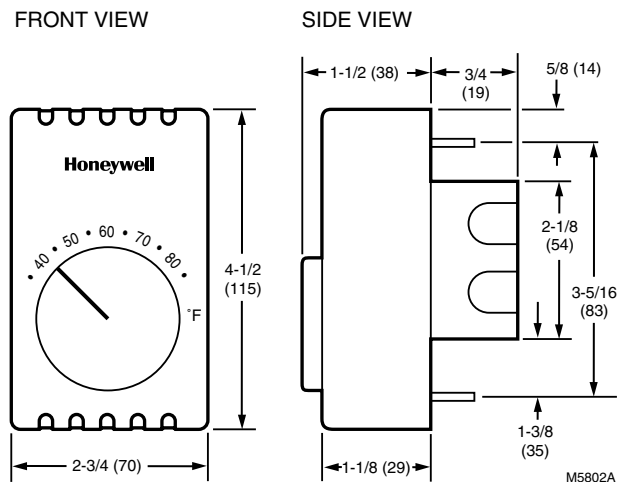


Fig. 1. T410 approximate dimensions in in. (mm).

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. Model Number.
2. Switching.

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).
2. 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.



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.

INSTALLATION

When Installing this Product...

1. Read these instructions carefully. Failure to follow these instructions could damage the product or cause a hazardous condition.
2. Check the ratings on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, check out product operation as provided in these instructions.



WARNING

**HIGH VOLTAGE CONTROL.
ELECTRICAL SHOCK HAZARD.**

Follow local codes and ordinances when installing this thermostat. Improper handling can cause serious injury or death.



CAUTION

1. Disconnect power supply to prevent electrical shock or equipment damage.
2. When connecting with aluminum conductors, use CO/ALR solderless wire connectors to avoid fire hazard.
3. To avoid damaging the sensing element, do not remove thermostat cover until wiring is complete.

Location

Install a vertical outlet box, which is used to mount the thermostat, about 5 ft (1.5 m) above the floor in an area with good air circulation at room temperature.

- Do not install the thermostat where it may be affected by:
- drafts or dead spots behind doors, in corners or under cabinets.
 - hot air from convectors.
 - radiant heat from sun or appliances.
 - concealed pipes and chimneys.
 - unheated (uncooled) areas such as an outside wall behind the thermostat.

Wiring and Mounting



CAUTION

1. To avoid damaging the sensing element, handle the thermostat with care.
2. Use a separate limit control in the heating appliance.
3. To prevent damage to dial stop when mounting the thermostat, turn the temperature setting dial until the setpoint indicator is at the 12 o'clock position.

Replacement Applications

1. Disconnect power to the thermostat to prevent electrical shock or equipment damage. All wiring must comply with local electrical codes and ordinances.
2. Remove the old thermostat from the wall, taking care not to damage the wiring insulation.
3. Check the old wire insulation for cracks, nicks or fraying. If necessary, apply approved electrical tape to insulate old wires or replace with new wires.
4. Do not remove the T410 Thermostat Cover. Using wire connectors approved for No. 12 wires, make line voltage connections directly to the leadwires on the thermostat. See Figs. 2 and 3 for typical wiring connections.
5. Prebend and push solid wires into the outlet box.
6. Remove thermostat cover by grasping the top and bottom cover edge and pulling it outward away from the thermostat base.
7. Turn the temperature setting dial so the setpoint indicator is at the 12 o'clock position to prevent damaging the dial stop.
8. Mount the thermostat on the outlet box. Tighten the two mounting screws (included) to secure the thermostat, taking care to avoid excessive pressure on the setting dial. See Fig. 4.

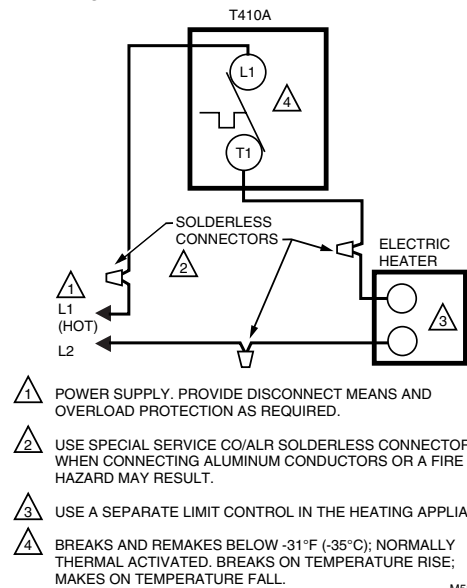


Fig. 2. Typical wiring connections for T410A.

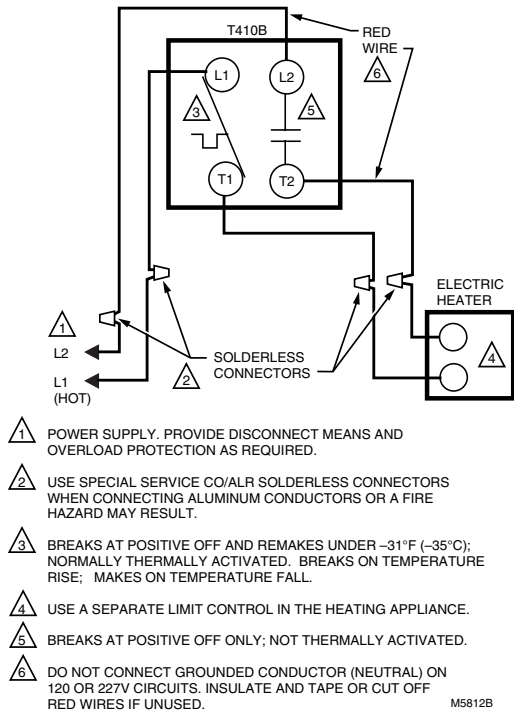


Fig. 3. Typical wiring connections for T410B.

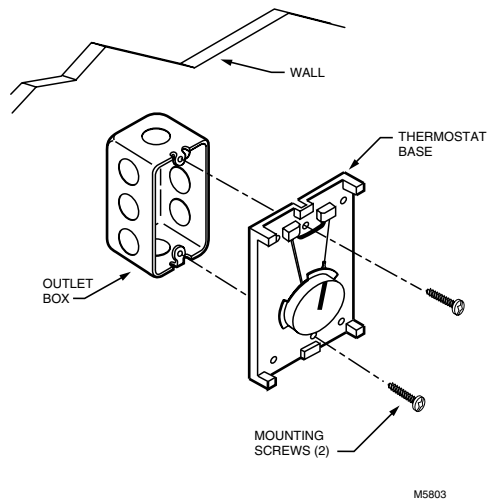


Fig. 4. Mounting thermostat on outlet box.

New Applications

- 1 Disconnect power supply to prevent electrical shock or equipment damage. All wiring must comply with local electrical codes and ordinances.
- 2 Run line voltage wiring to the thermostat location.
- 3 Do not remove the T410 Thermostat Cover. Using wire connectors approved for No. 12 wires, make line voltage connections directly to the leadwires on the thermostat. See Figs. 2 and 3 for typical wiring connections.

- 4 Prebend and push solid wires into the outlet box.
- 5 Remove the thermostat cover by grasping the top and bottom cover edge and pulling it outward away from the thermostat base.
- 6 Turn the temperature setting dial so the setpoint indicator is at the 12 o'clock position to prevent damaging the dial stop.
- 7 Mount the thermostat on the outlet box. Tighten the two mounting screws (included) to secure the thermostat, taking care to avoid excessive pressure on the setting dial. See Fig.4.

SETTINGS AND CHECKOUT

Setting

The thermostat temperature setting can be adjusted by turning the setting dial clockwise or counterclockwise to the desired setting. See Fig. 5. To determine appropriate setting, allow the thermostat to operate for several hours.

Checkout

IMPORTANT

Make sure all wiring connections are tight before proceeding with Checkout.

Check out thermostat operation as follows:

- 1 Turn the setting dial fully clockwise; heating circuit makes and electric heater starts.
- 2 Turn the setting dial fully counterclockwise; the heating circuit breaks and the heater starts to cool.

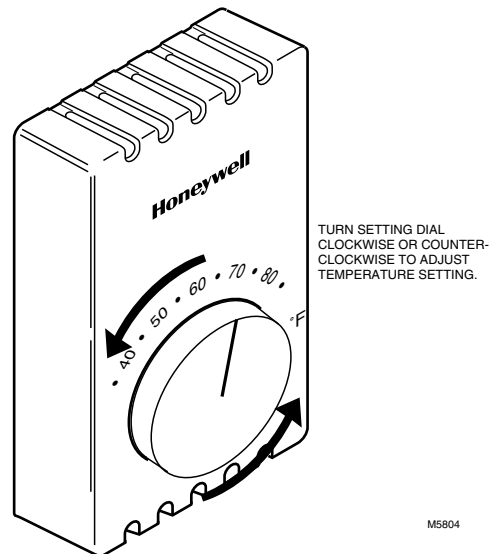


Fig. 5. Adjusting temperature setpoint.

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Home and Building Control

Honeywell Inc.
1985 Douglas Drive North
Golden Valley, MN 55422

Home and Building Control

Honeywell Limited-Honeywell Limitée
155 Gordon Baker Road
North York, Ontario
M2H 2C9

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