

## T874 Multistage Thermostats and Q674 Subbases

### PRODUCT DATA



### APPLICATION

These thermostats and subbases provide low voltage control of multistage heating and cooling systems, including heat pump systems.

### FEATURES

- T874 Thermostat has silent, dust-free mercury switches operated by coiled bimetal elements.
- Heat anticipator(s) are adjustable or fixed cooling anticipator(s) are fixed.
- Individual heat and cool levers and scales (most models) for temperature setting located on top of thermostat case.
- Cover thermometer on most T874 Multistage Thermostat models.
- Locking cover and locking lever screws available for T874 Multistage Thermostats.
- Versaguard™ Thermostat Guard or custom key lock thermostat guards available for T874 Multistage Thermostats.
- T874 Thermostat requires a Q674 Subbase.
- Q674 Subbase provides system and fan switching, wiring terminals and mounting base for T874 Multistage Thermostat.
- Adapter plate available for mounting Q674 on wall or horizontal outlet box.
- Light-emitting diodes (LEDs) located on subbase for easy reference.
- Up to three stages each of heating and cooling control possible.
- Models with setpoint restrictions and locking cover with no thermometer available for Department of Defense (DoD) and other special applications.
- Outdoor reset used on some models to improve thermal performance.

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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. This product is tested and calibrated under closely controlled conditions, and some minor differences in performance can be expected if those conditions are changed.

### Super Tradeline®/Tradeline® Models

SUPER TRADELINE controls offer features not available on TRADELINE or standard models, and are designed to replace a wide range of Honeywell and competitive controls.

TRADELINE models are selected and packaged to provide ease of stocking, ease of handling, and maximum replacement value. Specifications of SUPER TRADELINE and TRADELINE controls are the same as those of standard models except as noted below.

### Super Tradeline Models

#### T874 THERMOSTAT

- T874D Thermostat. Provides two stages of heating and two stages of cooling. Use with Q674A-F Subbases.
- Y594D (T874D/Q674E/TG504A) Thermostat/Subbase/key lock cover package. Provides two stages of heating and two stages of cooling. Includes a key lock cover for setpoint protection.
- Y594G (T874G/Q674F) Thermostat/Subbase package for heat pump. Provides two stages of heating and one stage of cooling. Automatic changeover in heat or cool mode. Available in beige or Premier White® color.
- Y594R (T874R/Q674L) Thermostat/Subbase package for heat pump. Provides two stages of heating and one stage of cooling. Manual changeover in heat or cool mode. Available in beige or Premier White® color.

#### SUPER TRADELINE FEATURES:

- SUPER TRADELINE package with cross reference label and special instruction sheet.
- SUPER TRADELINE model supplied with locking lever and locking cover accessories.
- Includes adjustable temperature locking stops.
- T874D replaces T874A-F TRADELINE or standard models.

## 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.

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 (800) 328-5111

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.

## Tradeline Models

### T874 THERMOSTAT

- T874 TRADELINE models provide staged heat and/or cool operation. See Table 1.

Table 1. Heating and Cooling Stages.

Models	A	B	C	D	E	F
Heating Stages	1	1	2	2	—	2
Cooling Stages	1	2	1	2	2	—

- T874A-F are standard models.

### TRADELINE FEATURES:

- TRADELINE package with cross reference label and special instruction sheet.
- T874A,C model available with factory stops for DoD applications.
- T874A,C model available with adjustable temperature locking stops.

### Q674 SUBBASE

Q674 switching subbases provide system and fan switching. See Table 2.

Table 2. System and Fan Switching.

Q674	System	Fan
A	Heat-Auto-Cool	Auto-On
B	Heat-Off-Cool	Auto-On
C	Off-Auto	Auto-On
D	None	None
E	Off-Heat-Auto-Cool	Auto-On
F	Em. Ht.-Off-Heat-Auto-Cool	Auto-On
G	Off-Auto	None
J	Em. Ht.-Auto-Off	Auto-On
L	Em. Ht.-Heat-Off-Cool	Auto-On

### TRADELINE FEATURE:

- TRADELINE package with cross reference label and special instruction sheet.
- Q674A-E,G are standard (non-heat pump) models. Q674F,J,L are heat pump models.

**Standard Models**

**T874 THERMOSTATS**

**Models:** See Table 3.

**Electrical Rating:** 24 to 30 Vac.

**Switching:** Coiled bimetal elements operate mercury switches.

**Temperature Adjustment:** Heating and cooling setting levers, with separate scales located on top of thermostat base. Common lever for heating and cooling on T874R; one cooling lever on T874E,V; and one heating lever on T874F,Q.

**Dimensions:** See Fig. 1.

**Temperature:** Scale Range: 42° to 88°F (6° to 31°C) standard; optional ranges available.

**Thermometer Range:** 42° to 88°F (6 to 31°C)

**Changeover Differential:** 4°F (2°C) minimum between heating and cooling (5°F [3°C] on T874W). Levers can be set apart for greater separation.

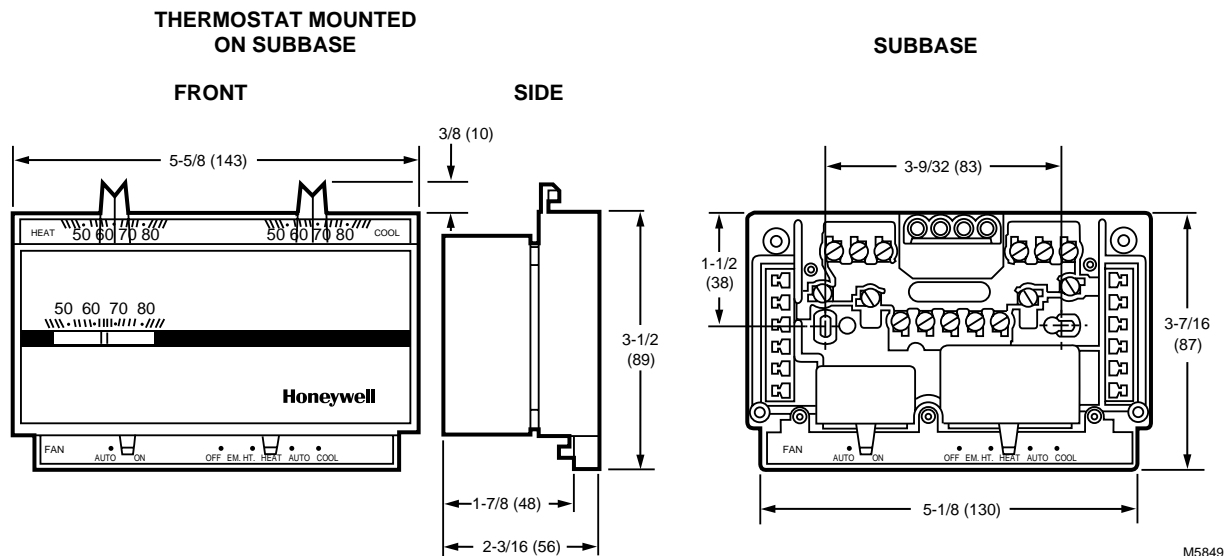
**Interstage Differential:**

Standard Models: Mechanical differential is 1°F (0.6°C) between heating or cooling stages; operating differential is approximately 1.9°F (1°C) between stages in heating or cooling.

Special Models: See Table 3.

**Finish:** Beige or Premier White® finish.

**Mounting Means:** T874 Multistage Thermostat mounts on Q674 Subbase. Subbase mounts horizontally on wall or outlet box. Mounts on vertical outlet box with optional 193121A Adapter Plate Assembly.



**Fig. 1. T874 Thermostat and Q674 Subbase dimensions in in. (mm).**

**Optional Specifications (T874 Only):**

Temperature scale ranges are 40° to 75°F (4° to 24°C) heating and 75° to 90°F (24° to 32°C) cooling with stop; 44° to 68°F (7° to 20°C) heating, 80° to 86°F (27° to 30°C) cooling; 6° to 29°C (43° to 85°F) Celsius scale; 3° to 22°C (38° to 72°F) and 26° to 32°C (78° to 90°F) cooling with stop.

Nonadjustable factory-added stop limits heating setpoint to 72°F (22°C) maximum and cooling setpoint to 78°F (26°C) minimum.

OEM customer personalization.

Locking cover and locking lever (see Thermostat Accessories).

Thermostat cover without thermometer.

Adjustable locking temperature stops.

Voltage heat anticipation for first or second stage heat or both. See Table 3.

Fast cycling on heating stage(s) for electric heat applications.

C815A Outdoor Thermistor for improved performance on specified models.

**Thermostat Accessories:**

Locking Cover and Locking Lever Assembly: Part no. 194559R with thermometer; 194559S without thermometer. See Fig. 2. Includes cover, screws, and Allen wrench for locking cover. The screws must be used to assure proper operation.

Adjustable Lever Stop: Part no. 4074ECK; includes lever stop and screws.

Universal Versaguard™ Thermostat Guard: Includes wall-plate, ring base, guard cover, tumbler lock, two keys and optional Honeywell logo insert. Double-wall construction provides extra measure of tamper-resistance. Tamper-resistant lock; key cannot be removed without being in locked position. Vents in guard base allow airflow for optimum thermostat performance. See form 68-0104 for more information.

- TG511A1000: Clear cover.
- TG511B1008: Opaque cover.
- TG511D1004: Painted steel (off-white) cover. See Fig. 2.

Key Lock Cover: Part no. TG504A replaces existing T874 cover. Mounts on T874 base and covers thermostat settling levers and subbase switches. Includes LED window and two keys. Should not be used with 193121A Adapter Plate.

- TG504A1025: Blank face, internal thermometer.
- TG504A1033: External thermometer. See Fig. 2.



**194559R Locking Cover with Thermometer Allen Wrench**



**TG504A1033 Key Lock Cover with External Thermometer**



**TG511D1004 Includes Painted Steel Cover, Opaque Base and Wallplate**

**Fig. 2. T874 Thermostat accessories.**

**Table 3. T874 Thermostat Specifications.**

Models and Options	Replaces	Applications	System Stages			Anticipation			
						Heating (Adj)		Cooling (Fixed)	
			Heat	Cool	Other	Stage 1	Stage 2	Stage 1	Stage 2
T874A—Standard and TRADELINE®. — 72°F/78°F (22°C/26°C) setpoint stops with locking cover. — Adjustable anticipator set 0.4A. — Adjustable locking temperature stops (TRADELINE®). — 72°F/78°F (22°C/26°C) setpoint stops with locking cover, no thermometer (for DoD <sup>a</sup> ).	T872A	Standard	1	1	—	0.1-1.2A	—	0-1.5A	—
T874B—Standard and TRADELINE.	T872B	Standard	1	2	—	0.1-1.2A	—	0-1.2A	0-1.0A
T874C—Standard and TRADELINE. — 72°F/78°F (22°C/26°C) set stops with locking cover, no thermometer (for DoD <sup>a</sup> ). — 12°F (7°C) differential between H1 and H2 stages (T874C1125). — Fast cycling.	T872C	Standard	2	1	—	0.1-1.2A	0.1-1.2A	0-1.5A	—
T874D—Standard and SUPER TRADELINE®. — Adjustable locking temperature stops (SUPER TRADELINE).	T872D	Standard	2	2	—	0.1-1.2A	0.1-1.2A	0-1.2A	0-1.0A
T874E—Standard and TRADELINE.	T872E	2-Stage Cool	—	2	—	—	—	0-1.2A	0-1.0A
T874F—Standard and TRADELINE. — Locking cover.	T872F	2-Stage Heat	2	—	—	0.1-1.2A	0.1-1.2A	—	—

<sup>a</sup> Department of Defense.

<sup>b</sup> Changeover stage operates with heating.

<sup>c</sup> Fixed voltage type anticipation.

<sup>d</sup> Changeover stage operates with heating; a secondary changeover is provided in cooling switch.

<sup>e</sup> Provides night setback used with standard T874 and timer-operated remote switching.

<sup>f</sup> Manual changeover stage—use Q674B,L subbase.

<sup>g</sup> Changeover stage operates with cooling.Q674 Subbases

— Fast cycling.		Electric Heat				0.12-0.6A	0.12-0.6A		
T874G—Heat pump, cool changeover, with fast cycling. — Fixed anticipator for H2. — Fast cycling.	T872G	Heat Pump or Standard	2	1	1 <sup>b</sup>	0-1.0A <sup>c</sup>	0.1-1.2A 0.1-1.5A 0.12-0.6A	0-1.0A	—
T874H—Use with Q674C.	T872H	Heat Pump or Standard	1	1	1 <sup>b</sup>	0-1.0A <sup>c</sup>	—	0-1.0A	—
T874J—Heat pump.	None	Heat Pump	2	1	2 <sup>d</sup>	0-1.0A <sup>e</sup>	0-1.5A <sup>c</sup>	0-1.0A <sup>c</sup>	—
T874K—Heat pump.	None	Heat Pump	2	1	1 <sup>b</sup>	0.1-1.2A	0-1.5A <sup>c</sup>	0-1.5A	—
T874L—Heat pump.	None	Heat Pump	2	1	—	0.1-1.2A	0.1-1.2A	0-1.5A	—
T874N—Heat pump, heat changeover.	T872N	Heat Pump	2	1	1 <sup>b</sup>	0.1-1.2A	0.1-1.2A	0-1.0A	—
T874P—Heat pump.	None	Heat Pump	2	1	—	0.1-1.2A	0.1-1.2A	0-1.5A	—
T874Q—Night setback heating.	T872Q	Standard	1 <sup>e</sup>	—	—	0.1-1.2A	—	—	—
T874R—Heat pump.	T872R	Heat Pump <sup>f</sup>	2	1	—	0-1.5A <sup>c</sup>	0.1-1.2A	0-1.5A	—
T874S—Two-speed compressor heat pump.	None	Heat Pump	2	2	1 <sup>g</sup>	0-1.2A <sup>c</sup>	0-1.2A <sup>c</sup>	0-1.2A	0-1.0A
T874V—Standard.	None	Standard	—	1	—	—	—	0-1.5A	—
T874W—Heat pump and standard. — Night setback heating.	T872W	Heat Pump or Standard	3	2	—	0-1.2A <sup>b</sup>	0-1.2A <sup>c,d</sup>	0-1.2A	0-1.0A

- <sup>a</sup> Department of Defense.
- <sup>b</sup> Changeover stage operates with heating.
- <sup>c</sup> Fixed voltage type anticipation.
- <sup>d</sup> Changeover stage operates with heating; a secondary changeover is provided in cooling switch.
- <sup>e</sup> Provides night setback used with standard T874 and timer-operated remote switching.
- <sup>f</sup> Manual changeover stage—use Q674B,L subbase.
- <sup>g</sup> Changeover stage operates with cooling.Q674 Subbases

**Models:**

See Table 4.

**Mounting:** Designed to mount horizontally on an outlet box or the wall. Adapter plate assembly available for mounting on a vertical outlet box (see Subbase Accessory).

**Electrical Ratings:**

Switch Contacts: 2.5A at 30 Vac (7.5A inrush).  
LED Lights (Optional): 30 Vac.

**Finish:** Dark brown or gray.

**Switches:** Two slide switches (one switch on Q674G and K; no switches on Q674D) operated by levers. Switch position is shown on scaleplate.

**Dimensions in in. (mm):** 3-1/2 (89)height; 5-5/8 (143) width; 5/16 (8) depth. See Fig. 1.

**Table 4. Q674 Subbase Specifications.**

Models and Options	Replaces	Application	Switch Positions		Use With
			System	Fan	
Q674A—Standard and TRADELINE®. — Indicator LEDs.	Q672A	Standard	HEAT-AUTO-COOL	AUTO-ON	T874A-D
Q674B—Standard and TRADELINE. — Provision for fan relay operation from external fan switch (isolate G terminal). — Indicator LEDs.	Q672B	Standard	HEAT-OFF-COOL	AUTO-ON	T874A-D
		Heat Pump	HEAT-OFF-COOL	AUTO-ON	T874G,H,L,R
Q674C—Standard and TRADELINE. — Indicator LEDs.	Q672C	Standard	OFF-AUTO	AUTO-ON	T874A-H,W
		Heat Pump	HEAT-OFF-COOL	AUTO-ON	T874K,L,N
Q674D—Standard and TRADELINE. — For use when subbase switching is not required.	Q672D	Standard	OFF	AUTO-ON	T874P
		Standard	None	None	T874A-F

Q674E—Standard and TRADELINE.	Q672E	Standard	OFF-HEAT-AUTO-COOL	AUTO-ON	T874A-D
Q674F—Two LED models. — EM.HT. light. — Provision for AUTO fan operation in EM.HT.	Q672F	Heat Pump	OFF-EM.HT.-HEAT-AUTO-COOL	AUTO-ON	T874C,D,G,N,S
			OFF-COOL-AUTO-HEAT-EM.HT.	AUTO-ON	
Q674G—O and B terminals.	Q672G	Standard	OFF-AUTO	None	T874A-F
Q674J—Provision for AUTO fan operation in EM.HT. — Provision for outdoor thermistor.	Q672J	Heat Pump	EM.HT.-AUTO-OFF	AUTO-ON	T874A,D,G,J
			EM.HT.-ON-OFF	AUTO-ON	
			SUPL.HT.-ON-OFF	AUTO-ON	
Q674K—Standard.	Q672K	Standard	OFF-HEAT-AUTO-COOL	None	T874F
			OFF-WOOD-WOOD/OIL-OIL	None	
Q674L—Provision for AUTO fan operation in EM.HT. — Indicator LEDs.	Q672L	Heat Pump	EM.HT.-HEAT-OFF-COOL	AUTO-ON	T874R,W
			SUPL.HT.-HEAT-OFF-COOL	AUTO-ON	
Q674N—Standard.	Q672N	Evaporative Cooler	EVAP-COOL-OFF-HEAT	AUTO-ON	T874C
Q674P—Standard.	Q672P	Heat Pump	SUPL.HT.-HEAT-COOL	AUTO-ON	T874G
Q674Q—Standard.	None	Fan Coil	HEAT-OFF-COOL	LO-MED-HI-ON	T874A
Q674R—Standard. — International symbols.	None	Fan Coil	OFF-COOL	LO-HI-CONT.	T874V
Q674S—Indicator LED.	None	Standard	HEAT-COOL	None	T874C

**Optional Specifications (Q674 Only):**

Models available with up to four LEDs; for example, LEDs can show EM. HT, AUX. HT, SERVICE, CHECK, FILTER, and LOCKOUT. See Fig. 3.

System switching marked HEAT-OFF/RESET-COOL for systems requiring impedance relay reset. Available on Q674B only.

G terminal isolated on heating to provide fan relay operation from external low voltage fan switch (Q674B only).

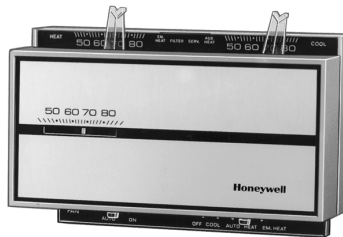
Auto fan operation on both heat and cool.

L terminal is used for system monitoring devices.  
Common R terminal for heating/cooling.  
Changeover in cool or heat mode for heat pumps.  
Auto fan in EM.HT. for heat pumps.

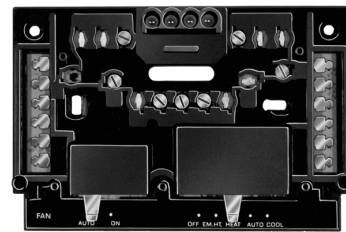
**Subbase Accessory:** 193121A Adapter Plate Assembly for mounting on vertical outlet box. Assembly includes adapter ring and cover plate. Use to cover wall marks from replaced thermostat.



**T874 Thermostat with One Setpoint Lever**



**T874 Thermostat with Separate Heating and Cooling Levers**



**Q674 Subbase with Four LEDs**

**Fig. 3. Heating, cooling levers and system LED indicators.**