

INNOVATOR™ PROGRAMMABLE THERMOSTATS

L21 SERIES THERMOSTATS - HEAT/COOL SYSTEMS



7 Day Model



24 Hour Model

Features (All Models):

- Extra-large, easy-to-read LCD.
- Selectable Fahrenheit or Celsius display.
- Display flashes CHECK FILTER after 360 hours (adjustable) of accumulated fan run time.
- On two stage cooling models, the LCD displays low and high for first and second stage cooling operation.
- Intelligent Anticipation eliminates the need to set the heat anticipation
- Five minute compressor off delay, four minute minimum equipment run time
- Monitors compressor run time and heating time in hours and cycles to aid in system diagnostics.
- Optional Outdoor Temperature sensor is available.
- Extra Subbase Terminals: C terminal is for the common wire to provide power directly from the transformer. O and B terminals control the reversing valve in single stage heat pump systems without the addition of an isolation relay.

Specifications (All Models):

- Provides 24VAC control for single-stage electric, gas or oil furnaces, single-stage intermittent ignition gas furnaces with or without vent dampers, single-stage cooling systems. 2 cool models may also be used for systems with two single stage compressors or one two speed compressor.
- Not for use with multi-stage heat systems, systems above 30VAC, heat pump systems, or millivolt systems.
- Automatic or manual changeover.
- System Switch: Off-Heat-Cool-Auto
- Fan Switch: On-Auto
- Requires the HOT and COMMON sides of the 24 VAC transformer be wired to the subbase.
- Electrical Input: 18 to 30VAC maximum, 50/60 Hz
- Temperature setpoint range: 45°F to 95°F (7°C to 35°C)
- Temperature display range: -40°F to 120°F (-40°C to 49°C)
- Minimum Heat/Cool Setpoint Differential: 3°F (1.6°C)
- Dimensions (H x W x D): 5-7/8 x 4-1/2 x 1-7/8 in. (149 x 114 x 48 mm)

Features - 24 Hour Programmable Models:

- Seven day independent programming, two programs per day, one day and one night, every day the same.
- Beginning and end times of night program and temperature settings are set using sliders.
- Night period setback can be temporarily overridden by pressing CANCEL button.
- The position of the sliders retain settings during a power interruption.
- Green RUN LED status light - system operating
- Green NIGHT LED status light - system operating in night mode

Features - 7 Day Programmable Models:

- Four programmable time periods per day - a total of 28 for the week.
- Program is retained in permanent memory until it is either erased or overwritten (no batteries required). The clock may need to be reset after a power interruption, but the program will remain intact.
- When Manual button is pushed, the thermostat is controlled by the slide settings like standard thermostats.
- Thermostat will return to program run mode after 3-hour temporary manual temperature override.
- Intelligent Copy™ saves steps during initial programming by automatically copying weekday and weekend programs for 5+2 weekly schedules.
- Green LED status light - system running
- Amber LED status light - manual override mode
- Flashing amber LED status light - temporary override in effect

90L34 L211201CC - 1 Heat/1 Cool - 24 Hour Programmable - Terminals: R_C, R_W, C, G, O, Y₁, B, Y₂, W

90J35 L212201CC - 1 Heat/2 Cool - 24 Hour Programmable - Terminals: R_C, R_H, C, G, O, Y₁, B, Y₂, W

90J38 L211407CC - 1 Heat/1 Cool - 7 Day Programmable - Terminals: R_C, R_W, C, G, O, Y₁, B, Y₂, W

90J39 L212407CC - 1 Heat/2 Cool - 7 Day Programmable - Terminals: R_C, R_H, C, G, O, Y₁, B, Y₂, W

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA



69H27 Outdoor Temperature Sensor A2000-ROS

- When installed outdoors, allows the thermostat to alternately display indoor and outdoor temperatures.
- Review bar on the thermostat may be used to display lowest and highest outdoor temperatures and the times at which they occurred.

INNOVATOR™ PROGRAMMABLE THERMOSTATS

L22/L23 SERIES THERMOSTATS - HEAT PUMP SYSTEMS



Features - 7 Day Programmable Models:

- Four programmable time periods per day - a total of 28 for the week.
- Program is retained in permanent memory until it is either erased or overwritten (no batteries required). The clock may need to be reset after a power interruption, but the program will remain intact.
- Large easy-to-read LCD.
- Selectable Fahrenheit or Celsius display.
- Display flashes CHECK FILTER after 360 hours (adjustable) of accumulated fan run time.
- On two stage cooling models, the LCD displays low and high for first and second stage cooling operation.
- When Manual button is pushed, the thermostat is controlled by the slide settings like standard thermostats.
- Thermostat will return to program run mode after 3-hour temporary manual temperature override.
- Separate button turns on emergency heat.
- Intelligent Copy™ saves steps during initial programming by automatically copying weekday and weekend programs for 5+2 weekly schedules.

- Intelligent Temperature Recovery™ automatically computes when to turn on the heat pump so that comfort temperature is efficiently recovered by the start of the period with minimal use of expensive auxiliary electric heat. This feature is optional and can be cancelled by turning off option switch.
- Green LED status light - system running
- Amber LED status light - manual mode
- Flashing amber LED status light - temporary override in effect
- Red LED status light - emergency heat mode
- Flashing red LED status light - problem with the system (when used with HP21/HP26/HP27/HP28/HP32 models).
- Five minute compressor off delay, four minute minimum equipment run time.
- Monitors compressor run time and heating time in hours and cycles to aid in system diagnostics.
- If an optional Outdoor Temperature Sensor is installed, the auxiliary heat lockout option can be used. The setpoint when the auxiliary electric heat (WI) will not operate can be set between 20°F and 60°F (-6.6°C and 15.5°C).

Specifications (all models):

- Provides 24VAC control for single-speed compressor system with or without auxiliary heat, two single-speed compressor systems with or without auxiliary heat, or two-speed compressor systems with or without auxiliary heat.
- Not for use with systems above 30VAC or millivolt systems.
- Automatic or Manual changeover
- System Switch: Off-Heat-Cool-Auto
- Fan Switch: On-Auto
- Requires the HOT and COMMON sides of the 24 VAC transformer be wired to the subbase.
- Terminals: Y₁, E, R, Y₂, W₁, G, O, B, L, C
- Electrical input: 18 to 30VAC maximum, 50/60 Hz
- Temperature setpoint range: 45°F to 95°F (7°C to 35°C)
- Temperature display range: -40°F to 120°F (-40°C to 49°C)
- Minimum Heat/Cool Setpoint Differential: 3°F (1.6°C)
- Dimensions (H x W x D): 5-7/8 x 4-1/2 x 1-7/8 in. (149 x 114 x 48 mm)

91H72 L221407HP - 2 Heat/1 Cool - 7 Day Programmable

91H73 L232407HP - 3 Heat/2 Cool - 7 Day Programmable

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

69H27 Outdoor Temperature Sensor A2000-ROS - See previous page for photo

- When installed outdoors, allows the thermostat to alternately display indoor and outdoor temperatures.
- Review bar on the thermostat may be used to display lowest and highest outdoor temperatures and the times at which they occurred.
- Required if auxiliary heat lockout option is used on heat pumps.

T8600 SERIES THERMOSTATS - HEAT/COOL SYSTEMS AND HEAT PUMP SYSTEMS



Features:

- Seven day programmable.
- Frequently used keys are located by the back-lit, large LCD.
- Fahrenheit or Celsius temperature display.
- Setpoints are permanently held in memory (no batteries used) and retained during power outages.
- Adaptive Intelligent Recovery™ control brings the room temperature to temperature setpoint at the programmed time, maximizing comfort and energy savings.
- Copy key makes programming easier and faster.
- Daylight Savings Time (DST) key for quick change in and out of Daylight Savings Time.
- Electric or conventional heat fan operation.

- Temporary temperature setpoint changes for current period, vacation hold (1 to 255 days) or indefinite hold.
- Adjustable range stops and adjustable heating cycle rate.
- Minimum Off (Heat and Cool): factory setting 5 minutes; option 0 to 5 minutes.

Specifications:

- Provides electronic control of 24 VAC single-stage or multi-stage heating and cooling systems, including heat pump systems.
- Automatic or manual changeover
- System Switch: Heat-Off-Cool-Auto (Heat/Cool models) or Em Heat-Heat-Off-Auto-Cool (Heat Pump models)
- Fan Switch: On-Auto
- Electrical Ratings: 20 to 30 VAC, 50/60 Hz, Load Rating: 6 VA maximum at 30 VAC, 50/60 Hz
- Operating Temperature Range: 40 F to 110 F (4 C to 43 C)
- Heating temperature setpoint range: 40°F to 90°F (4.5°C to 32°C)
- Cooling temperature setpoint range: 45°F to 99°F (7°C to 35°C)
- Minimum Heat/Cool Setpoint Differential: 3°F (1.6°C)
- Dimensions (W x H x D): 6-1/16 x 3-3/4 x 1-9/16 in. (154 x 95 x 40 mm)

37L61 T8624D2079 - 2 Heat/2 Cool - Heat/Cool Systems, receives power through HOT & COMMON side of 24V transformer
Terminals: Y₁, Y₂, W₁, W₂, G, R, R_C, O, B, OT, OT

37L59 T8600D2127 - 1 Heat/1 Cool - Heat/Cool Systems, power-robbing
Terminals: Y, W, G, R, R_C, O, B, OT, OT

37L60 T8611G2101 - 2 Heat/1 Cool - Heat Pump Systems, receives power through HOT & COMMON side of 24V transformer
Terminals: Y₁, W₁, W₂, G, E, L, R, C, O/B, OT, OT, X₁, X₂

INNOVATOR™ PROGRAMMABLE THERMOSTATS

IF8 SERIES THERMOSTATS - HEAT/COOL SYSTEMS AND HEAT PUMP SYSTEMS



Features (All Models):

- 5 + 2 day programmable
- Simultaneous heating and cooling program storage eliminates the need to reprogram the thermostat each season.
- LCD displays setpoint temperature and alternately shows actual time and temperature.
- Selectable Fahrenheit or Celsius display.
- Time and temperature settings are preprogrammed and easy to change.
- Hold temperature button allows manual program override for an indefinite period without changing programming.
- Temporary temperature override until next program period.
- Five-minute compressor short cycle protection in cooling.
- B and O terminals.

Specifications (All Models):

- Manual changeover
- Fan Switch: Fan On - Auto
- Temperature Setpoint Range: 45 to 90°F (7 to 32°C)
- Dimensions (H x W x D): 4-1/2 x 6-3/4 x 1-1/4 in. (114 x 171 x 32 mm)

99K55 1F80-69 - 1 Heat/1 Cool - Heat/Cool Systems

Features:

- Battery powered, requires 3 "AA" batteries (included)
- Low battery indicator - two year estimated battery life.
- Low and high limit temperature protection in case of battery failure.
- Forced air or hydronic heating anticipation.

Specifications:

- For use with single stage heat/cool or heat only systems, electric heat systems, gas or oil fired systems, hydronic (hot water or steam) systems, DC systems or 750 millivolt systems.
- Not for use with multi-stage systems, multi-stage heat pump systems, 3-wire zoned heat systems, or systems exceeding 30VAC.
- System Switch: Cool - Off - Heat
- Terminals: R_C, G, Y, O, B, R_H, W
- Electrical Rating:
 - 18 to 30 VAC (50/60 Hz) or DC
 - 0.05 to 1.5 Amps (load per terminal)
 - 1.5 Amps maximum total load (all terminals combined)
- Rated Differential: 0.8°F Forced Air, 2.2 °F hydronic

99K56 1F82-69 - 2 Heat/1Cool - Heat Pump

Features:

- System powered. Requires HOT and COMMON from 24 volt transformer
- Capacitor will retain program for 5+ hours without power.
- Temporary 9-volt battery connection for armchair programming.
- Program reset button
- LED for Emergency, Auxiliary heat and Malfunction indication.
- Computed EMR (Energy Management Recovery) program allows for a head start on recovery from setback or setup program temperature is reached when desired.
- Fossil fuel or electric fan operation (second stage).
- Adjustable anticipation.

Specifications:

- For use on manual changeover heat pump systems with up to two stages heat, one cool.
- Not for use with millivolt systems, multi-stage non-heat pump system, or systems exceeding 30VAC and 1.5 Amps.
- System Switch: Cool - Off - Heat
- Terminals: R, L, C, E, W₂, G, Y, O/B
- Electrical Rating:
 - 20 to 30 VAC (50/60 Hz) or DC
 - 0.05 to 1.5 Amps (load per terminal)
 - 1.5 Amps maximum total load (all terminals combined)
- Rated Differential: 0.5°F forced air systems, 1.5°F hydronic systems

INNOVATOR™ PROGRAMMABLE THERMOSTATS

1F90/1F97 SERIES THERMOSTATS - HEAT/COOL SYSTEMS



Features:

- System powered. Requires HOT and COMMON from 24 volt transformer
 - Battery back up with 3 "AA" (included). Low battery indicator.
 - Four separate time/temperature settings per 24 hour period.
 - Pre-programmed time and temperature settings in all four programming periods.
 - Simultaneous heating and cooling program storage eliminates the need to reprogram the thermostat each season.
 - Temperature setpoints reset and hold 64°F in heating or 82°F in cooling if no battery back up.
 - Selectable Fahrenheit or Celsius display
 - Back-lit display.
 - LCD displays setpoint temperature and alternately shows actual time and temperature. Also shows system and fan status.
- Programmable fan control permits continuous fan during any given program period.
 - Computed EMR (Energy Management Recovery) program allows for a head start on recovery from setback or setup program temperature is reached when desired.
 - Adjustable anticipation.
 - Approximately one minute blower off delay in cooling.
 - Keypad lockout option.
 - Audio beep and visual program prompting.
 - Compressor short cycling protection.

Specifications:

- For use with single stage heat/cool systems, heat only systems, gas, oil, electric (where blower is energized by fan relay on heat and cool), three-wire zoning systems and 250-750 millivolt systems.
- Automatic or manual changeover
- System Switch: Auto-Heat-Off-Cool
- Fan Switch: On-Auto
- Terminals: W, R, G, Y
- Electrical Rating: 17 to 30 VAC (50/60 Hz), 0.05 to 1.5 Amps
- Temperature Setpoint Range: 40 to 99°F (4 to 37°C)
- Rated Differential: 0.5°F to 1.5°F, adjustable
- Anticipation Index Range:
 - Heating 2 to 40; preset at 5
 - Cooling 4 to 40; preset at 14
- Dimensions (H x W x D) - 3-13/16 x 6-3/8 x 1-3/4 in. (97 x 162 x 44 mm)

18H10 1F90 - 5 + 2 Day -1 Heat/1 Cool

18H11 1F97 - 7 Day - 1 Heat/1 Cool

1F92/1F94 SERIES THERMOSTATS - HEAT PUMP SYSTEMS



Features:

- System powered. Requires HOT and COMMON from 24 volt transformer.
 - Battery back up with 9-volt battery (included). Low battery indicator.
 - Simultaneous heating and cooling program storage eliminates the need to reprogram the thermostat each season.
 - Audio beep and visual program prompting.
 - Selectable Fahrenheit or Celsius display
 - Back-lit display.
 - LCD displays setpoint temperature and alternately shows actual time and temperature.
 - Computed EMR (Energy Management Recovery) program allows for a head start on recovery from setback or setup. Program temperature is reached when desired.
- Adjustable anticipation.
 - HOLD TEMP button provide a two hour manual temperature override in heat and cool modes.
 - Green LED indicator light - compressor activity
 - Yellow LED indicator light - auxiliary activity.
 - Red LED indicator light - malfunction.
 - Red LED indicator light - emergency mode.

Specifications:

- Automatic or manual changeover
- System Switch: Auto - Heat - Emergency - Off - Cool
- Fan Switch: On - Auto
- Terminals: W₁, E₁, E₂, L, R, W₂, W₃, O, B, Y₁, Y₂, C, B
- Electrical Rating: 20 to 30 VAC (50/60 Hz), 0.01 to 1.5 Amps normal load, 0.01 to 2.5 Amps Total combined load
- Temperature Setpoint Range: 40 to 99°F (4 to 37°C)
- Rated Differential: 0.5°F to 1.5°F, adjustable
- Anticipation Index Range: Heating 4 to 40; preset at 8; Cooling 4 to 40; preset at 14
- Dimensions (H x W x D): 3-3/4 x 6-1/2 x 1-3/4 in. (95 x 165 x 44 mm)

18H12 1F92 - 5 + 2 Day - 3 Heat/2 Cool

- Provisions for electric heat.
- Programmable blower control.

18H13 1F94-71 - 7 Day - 3 Heat/2 Cool

- COPY button - duplication of one day's program to another day.
- Keypad lockout option.
- Reversing valve output.

ELITE® SERIES DIGITAL SLIMLINE

DSL SERIES THERMOSTATS - HEAT/COOL SYSTEMS AND HEAT PUMP SYSTEMS



Features:

- System powered. Requires HOT and COMMON from 24 volt transformer.
- Easy-to-read vertical LCD that displays complete operation status.
- Selectable Fahrenheit or Celsius display.
- Fan selector for continuous fan operation.
- Maintains the last setpoint and mode of operation following power outages (no battery).
- Day/Night button for user selectable alternate setpoint for manual setback.
- Built-in anticipation and droop. Electronic circuitry replaces conventional mechanical anticipation.
- 2 or 4 minute selectable minimum on/off times.
- High temperature thermal cut-off switch.
- Built-in short cycle protection.
- 45-second fan-purge after cooling call.
- Keypad lockout option.
- Solid state electronic output.

- Plenum fan switch.
- Thermostat output using relays.
- Low profile ABS plastic case with lockable access cover.
- Optional Indoor and Outdoor Sensors are available
- Heat pump models feature: selectable reversing valve outputs, auxiliary-heat light indicator, two user-defined lights and adjustable balance point outdoor temporary option.

Specifications:

- Automatic changeover
- Remote clock terminals
- Electrical Rating: 20 to 30 VAC
- Ambient Temperature Range: 32 to 115°F (0 to 48°C)
- Cooling Temperature Setpoint Range: 61 to 104°F (16 to 40°C)
- Heating Temperature Setpoint Range: 41 to 86°F (5 to 30°C)
- Minimum Heat/Cool Setpoint Differential: 2°F (1°C)
- Dimensions: 4-1/2 H x 4 W x 7/8 D in. (114 x 102 x 22 mm)

13K95 DSL-300LX - 1 Heat/1 Cool - Heat/Cool Systems
Terminals: W₁, Y₁, G, R, 24V, 24V(C), CLK1, CLK2, RS1, RS2, RSV

13K96 DSL-450LX - 2 Heat/1 Cool - Heat Pump Systems
Terminals: W₁, Y₁, G, O, B, R, 24V, 24V(C), LED1, LED2, CLK1, CLK2, RS1, RS2, RSV

13K97 DSL-600LX - 3 Heat/2 Cool - Heat Pump Systems
Terminals: W₁, Y₁, G, O, B, R, 24V, 24V(C), LED1, LED2, CLK1, CLK2, RS1, RS2, RSV

13K98 DSL-700LX - 2 Heat/2 Cool - Heat Pump Systems
Terminals: W₂, Y₂, W₁, Y₁, G, R, 24V, 24V(C), LED1, LED2, CLK1, CLK2, RS1, RS2, RSV

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA



26K57 LX-IDS - Indoor Remote Sensor

- Provides digital communication of space temperature back to the controlling thermostat for up to 300 feet (91 m) away
- Requires 3 conductor thermostat wire.
- May be wired with up to six LX-IDS sensors in daisy-chain for temperature averaging.
- May be used with optional LX-ODS outdoor sensor

37K09 LX-ODS - Outdoor Remote Sensor

- Provides digital communication of outdoor temperature back to the controlling thermostat up to 300 feet (91 m) away.
- Requires 3 conductor thermostat wire.
- May be used with optional LX-IDS Indoor Remote Sensor

MERIT™ SERIES ELECTRO-MECHANICAL

3AA SERIES - HEAT/COOL AND HEAT PUMP SYSTEMS



Features (All models):

- Exclusive Positive Temperature Coefficient (PTC) thermistor that reduces thermostat droop, eliminates anticipator adjustment, maintains a more constant temperature and even system cycling
- Includes subbase.

Specifications (All Models):

- Fan switch: Off-Auto
- Temperature Setpoint Range: 50°F to 90°F (10°C to 32°C)
- Minimum Heat/Cool Setpoint Differential: 2°F (1°C)
- Switch Rating: mercury switches 1.5 amps at 30V, slide switches 2 amps at 30V
- Temperature scales in both Fahrenheit and Celsius
- Scale marking: 5° per division, numbered every 10°
- Dimensions: 6-5/16 x 2-3/4 x 1-15/16 in. (160 x 70 x 50 mm)

97H28 3AAT88D38D - 2 Heat/2 Cool - Heat/Cool System

- Automatic or manual changeover
- System selector: Heat-Off-Auto-Cool
- Two separate temperature selector levers for heating and cooling operation
- Terminals: R_C, R_H, G, Y₁, Y₂, C, W₁, W₂

78H22 3AAT89A38A2 - 1 Heat/1 Cool - Heat/Cool Systems

- Manual changeover
- System selector: Heat-Off-Cool
- One temperature selector lever for heating and cooling operation.
- Terminals: W, B, O, Y, R, G

51H34 3AAT88C38B2 - 1 Heat/2 Cool - Heat/Cool Systems

- Automatic or manual changeover
- System selector: Off-Heat-Auto-Cool
- Green indicator light - low speed cooling
- Two separate temperature selector levers for heating and cooling operation.
- Terminals: R_C, R_H, G, Y₁, Y₂, C, W₁

86H23 3AAT88A38A2 - 1 Heat/1 Cool - Heat/Cool Systems

- Automatic or manual changeover
- No Fan Switch
- System selector: Off-Auto
- Two separate temperature selector levers for heating and cooling operation.
- Terminals: R, Y₁, W₁

67K47 3AAT88D38E1 - 2 Heat/2 Cool - Heat Pump Systems

- Manual changeover
- System selector: Heat-Off-Cool
- Emergency heat switch
- Orange indicator light - emergency heat mode
- Red indicator light - heat pump malfunction
- Green indicator light - low speed cooling or both speeds heating
- Two separate temperature selector levers for heating and cooling operation.
- Connections for ambient compensating thermistor
- Terminals: R, O, G, Y₁, Y₂, L, W₁, T, C, E

21J72 3AAT89B38E1 - 2 Heat/1 Cool - Heat Pump Systems

- Manual changeover
- System selector: Heat-Off-Cool
- Emergency heat switch
- Amber indicator light - emergency heat mode
- One temperature selector lever for heating and cooling operation
- Terminals: R, O, G, Y₁, W₁, C, E

67K48 3AAT89B38G1 - 2 Heat/1 Cool - Heat Pump Systems

- Manual changeover
- System selector: Heat-Off-Cool
- Emergency heat switch
- Amber indicator light - emergency heat mode
- Red indicator light - heat pump malfunction
- One temperature selector lever for heating and cooling operation
- Connections for ambient compensating thermistor
- Terminals: R, O, G, Y₁, L, T, W₁, C, E

51H40 3AAT88D38B2 - 2 Heat/1 Cool - Heat Pump Systems

- Automatic changeover
- System selector: Heat-Auto-Cool
- Emergency heat switch
- Amber indicator light - emergency heat mode
- Two separate temperature selector levers for heating and cooling operation.
- Terminals: R_C, R_H, G, Y₁, O, C, E, W₁

21J73 3AAT89B38F1 - 2 Heat/1 Cool - Heat Pump Systems

- Manual changeover
- System selector: Heat-Off-Cool
- One temperature selector lever for heating and cooling operation.
- Terminals: R, O, G, Y₁, W₁, C

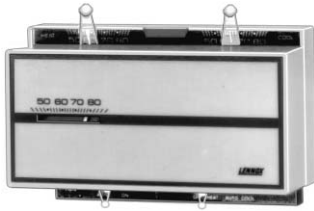
OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

76F53 Monitor Kit

- Recommended for HP29, 10HPB & 12HPB units with thermostat (67K48) for operation of indicator lights.
- Contains ambient compensating thermistor and service light thermostat.

MERIT™ SERIES ELECTRO-MECHANICAL

T874 SERIES - HEAT/COOL SYSTEMS



Features (All models):

- Dual temperature scale Fahrenheit and Celsius
- Dual switches, one for heat, one for cooling, except one lever for cooling on 13F09.
- Coiled bimetal elements operate dust-free mercury switches.
- External levers and scale for temperature setting on top of thermostat case
- Requires Q674 thermostat subbase to provide wiring terminals, mounting base, and system and fan switching. Subbase mounts on wall or horizontal outlet box. Electrical ratings contacts: 2.5 AMP at 30 VAC, 7.5 AMP inrush.

Specifications (All Models):

- 24 VAC control of multi-stage heating, cooling, and heating-cooling systems.
- Fan Switch: On-Auto
- Automatic or manual changeover
- Temperature setpoint range: 42°F to 88°F (6°C to 31°C)
- Temperature indicator range: 42°F to 88°F (6°C to 31°C)
- Electrical ratings: 24 to 27 VAC
- Differential: 4°F (2°C) minimum between heating and cooling
- Dimensions (H x W x D) (including Subbase): 3-9/16 x 5-5/8 x 2-3/16 in. (91 x 143 x 56 mm)

12F99 T874A1051 - 1 Heat/1 Cool - requires 13F17 Subbase

13F02 T874B1050 - 1 Heat/2 Cool - requires 13F17 Subbase

13F04 T874C1034 - 2 Heat/1 Cool - requires 13F17 Subbase

13F06 T874D1033 - 2 Heat/2 Cool - requires 13F17 Subbase

13F09 T874E1032 - 0 Heat/2 Cool - requires 13F15 Subbase

13F15 Q674C1009 Subbase - System Switch: Off-Auto - Terminals: R_H, R_C, Y₁, Y₂, W₁, W₂, G, O, B

13F17 Q674E1262 Subbase - System Switch: Off-Heat-Auto-Cool - Terminals: W₁, W₂, Y₁, Y₂, G, R_C, R_H

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA



- Protects T874 thermostats and Q674 subbases against damage and hinder tampering with thermostat settings and subbase switches.
- Easy-to-install key lock cover replaces thermostat cover without removal or adjustment of thermostat. No screws or mounting accessories are required.
- Rugged molded plastic cover allows good airflow for proper system performance.
- Temperature operating range: 55°F to 95°F (13°C to 35°C)
- Dimensions (H x W x D): 4-7/16 x 6-1/16 x 2-1/8 in. (113 x 154 x 113 mm)

18F82 TG504A1041 - with thermometer

18F81 TG504A1058 - without thermometer

T87F SERIES - HEAT/COOL SYSTEMS



T87F
Thermostat



T87F Thermostat
with Subbase

Features (All Models):

- Available with two- or three-wire wallplate for heating-only, cooling-only, or heating-cooling systems with remote switching.
- Adjustable heat anticipator for comfortable temperature control.
- Use Q539 Subbase in heating and cooling systems requiring system and fan switching at the thermostat location.
- Knurled dial provides easy set point adjustment.
- Separate temperature setting and thermometer scale on thermostat face.

Specifications (All Models):

- Manual changeover
- Mercury switch electrical rating: 30 VAC
- Anticipator settings: Heating: 0.1A to 1.2A., Cooling: 0A to 1.5A, 24 to 27 VAC
- Dimensions (Diameter x Depth)
Thermostat - 3-1/4 x 1-1/2 in. (83 x 38 mm)
Thermostat with Subbase - 3-11/16 x 1-3/4 in. (94 x 45 mm)

25M90 T87F5488 - 1 Heat/0 Cool - Taupe - Terminals: R, W

25M91 Q539A1584 - Subbase - Taupe - Terminals: R_H, R_C, W, Y, G, X

25M22 T87F5488 - 1 Heat/1 Cool - Taupe, with Q539A1006 Subbase - Terminals: R_H, R_C, W, Y, G, X

78H49 T87F3863 - 1 Heat/1 Cool - White, with Q539A1485 Subbase - Terminals: R_H, R_C, W, Y, G, X

25M93 32005439-003 - Cover Plate - Taupe - covers existing holes

MERIT™ SERIES ELECTRO-MECHANICAL

1F56 SERIES - HEAT/COOL SYSTEMS



Specifications (All Models):

- Manual changeover
- Temperature setpoint range: 50°F to 85°F (10°C to 29°C)
- Temperature indicator range: 50°F to 90°F (10°C to 32°C)
- Heat anticipator: adjustable from 0.15 to 1.0 AMPS
- Cooling anticipator: fixed resistance 0 to 1.5 AMPS
- Fan Switch: On-Auto
- System Switch: Cool-Off-Heat
- Dimensions: 4-1/2 x 3-1/4 x 1-11/16 in. (114 x 83 x 43 mm)

17G17 1F56W420 - 1 Heat/1 Cool - Terminals: G, R_C, C, O, R_H, A, Y, W, B

T834C SERIES - HEAT/COOL SYSTEMS



Features (All models):

- Low voltage control of single-stage heating, cooling or heating-cooling systems.
- Vented cover for improved temperature sensing.
- Mounts directly on wall or on vertical outlet box.
- Includes new probe holes to aid checkout and service work.
- Dustproof, SPDT mercury switch.

Specifications (All Models):

- Manual changeover
- System Switch: Cool-Off-Heat
- Fan Switch: On-Auto
- Electrical Ratings: Heating: 0.18 to 1.0A at 30 VAC maximum, Cooling: 1.5A running, 7.5A inrush at 25 VAC.
- Temperature setpoint range: 55°F to 95°F (13°C to 35°C)
- Temperature indicator range: 55°F to 95°F (13°C to 35°C)
- Heat anticipator: adjustable from 0.18 to 1.0 AMP
- Cooling Anticipator: fixed resistance 24 to 30 VAC 1.5 AMP running, 7.5 AMP inrush
- Dimensions (W x H x D): 2-7/8 x 4-3/4 x 1-1/8 in. (73 x 121 x 29 mm)

29M80 T834C2663 - 1 Heat/1 Cool - Terminals: R, G, Y, W

INNOVATOR™ PROGRAMMABLE THERMOSTATS

T7300 SERIES THERMOSTATS - HEAT/COOL SYSTEMS AND HEAT PUMP SYSTEMS



Features:

- One model can be used for single stage and multi-stage applications.
- 7-day programming - 2 occupied/unoccupied periods per day.
- Individual temperature set points for: Occupied heat and cool and Unoccupied heat and cool.
- Proportional plus integral control eliminates temperature fluctuations and thermostat tampering.
- Intelligent Recovery® - automatically optimizes start time depending on building load.
- Intelligent Fan™ - energizes fan only on call for heating or cooling during unoccupied periods.
- Locking set points and schedules eliminate tampering.
- Optional remote sensors and override capability.
- Override allows temporary changes.
- Maintains programmed times and temperatures for life of product. No batteries required. Clock may need to be reset after power outage.
- Choice of Subbases

Specifications:

- Automatic or manual changeover
- Electrical Rating: 20 to 30 VAC, 50/60 Hz
- Ambient Temperature Range: 40°F to 110°F (4°C to 43°C)
- Temperature Setpoint Range: 45°F to 95°F (7°C to 35°C)
- Dimensions (including Subbase) H x W x D: 4-5/8 x 8 x 1-3/4 in. (118 x 204 x 41 mm)

Subbase Features:

- Auxiliary relay output.
- Remote sensor and discharge air capability.
- 2 configurable LEDs
- Terminals: A₁, A₃, W₂, A₂, Y₂, C₁, C₂, C₃, C₄, C₅, W₁, Y₁, G, R_C, R_H, X, X₁, X₃, X₄, T, T, AS, AS

37L54 T7300 Thermostat

37L53 Q7300 Subbase - 3 Heat/3 Cool

37L55 Q7300 Subbase - 2 Heat/2 Cool

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

58C92 Remote Temperature Sensor

86G67 Room Temperature Sensor - 3 hour override, setpoint adjustment and indicator LED's

27C40 Return Air Sensor

12F83 SP11 Status Panel