



Smart Heating Solutions

60
Years

We Believe Experience Matters

Thermostats & Controls



QUALITY IS KING

ELECTRIC HEATER
MANUFACTURING

EST. 1958 · SEATTLE, WA

KING-ELECTRIC.COM

Celebrating 60 Years of American Comfort

Since 1958, King Electric has delivered American Made, smart comfort products to homes and families through industry leading innovation, building a legacy of trust, and delivering unparalleled reliability.

After 60 years of manufacturing high-quality American-made electric heaters, we can not forget our partners in the field that make KING what it is today. To all of the electrical distributors and electricians that have supported us over the years, we say Thank You. Discover all the ways King has redefined Comfort, today and for the next 60 years.

WiFi Elec. Prog. Thermostat ATMOZ WiFi Series



Wifi **ATMOZ**



- Programmable with Atmoz Smart Phone App
- Single or double pole line voltage
- Back-lit display for easy viewing
- Temperature range 41° - 90°F (5° - 32°C)
- Program 4 or 6 time periods for maximum flexibility

- Electronic sensing for accurate temperature control ($\pm 1^\circ\text{F}$)
- For use on baseboard, fan forced & radiant electric heaters
- Large back-lit buttons allow easy adjustment & programming
- Mounts directly to a 2x4 inch vertical electrical outlet box

Wifi



The ATMOZ WiFi Enabled Thermostat & Smart Phone App

Wifi Enabled: King's Atmoz WiFi enabled thermostat combines the latest technology with a sleek modern design, offering unparalleled user control. It's highly accurate sensing technology saves up to 28% on heating costs. This feature achieves higher comfort levels with reduced temperature swings as compared to economy models. With its simple, intuitive smart phone app interface you can control all thermostats in your home with ease. Control is always in the palm of your hands.

Ordering Information

MODEL	UPC	DESCRIPTION
ATMOZ1-240-WIFI	10396	1P WIFI Programmable Electronic Thermostat, 240V
ATMOZ2-240-WIFI	10397	2P WIFI Programmable Electronic Thermostat, 240V

Engineering Specifications

Temperature Range: 41° - 90°F (5° - 32°C) **Accuracy:** +1° F
Max Power: 3328W @ 208VAC (16A)
Max Power: 3840W @ 240VAC (16A)
Sensing Element: Electronic



Smart Phone iPhone or Android App



- ✓ Connect Via WIFI For Convenient Programming & Use
- ✓ Easy To Navigate Menus For Quick Programming
- ✓ Control Multiple Thermostats For Total Home Control
- ✓ Available for Android and iOS.

Wifi



WiFi Elec. Prog. Thermostat ATMOZ WiFi Series



In-Home mobility

Convenient **Wifi** connectivity allows for total user comfort throughout the home. Control from anywhere with cell service or Wifi. With the **ATMOZ** smart phone app, you can adjust the temperature of your thermostat from the comfort of the couch. The climate of your home will become a customized atmosphere that you control, or let **ATMOZ** do it for you.



Comfort just a click away

The **ATMOZ** menu & interface were designed to create an excellent experience for all users. Including password protection to block unauthorized users from making unwanted changes. Each menu is easy to navigate and includes large buttons, allowing for quick and simple programming of all your custom settings. Making changes is no longer a hassle. Going on vacation, simply pre-schedule your Vacation Mode Settings. With **ATMOZ**, your home is in good hands.



Infinite possibilities

While using **ATMOZ**, total home control becomes your reality. The app allows the user to control multiple thermostats, with no limit, throughout the home. **ATMOZ** thermostats are programmable with up to six time periods in a day. By selecting Boost Mode, the current period can be extended up to 3 additional hours, without altering the programmed schedule. Let **ATMOZ** find new possibilities in your home.



Changes made easy

Manually override your programmed settings at any time with the app or directly through the thermostat. Your presets will still retain the same settings, and the override temperature will only remain until the end of the current period. However, by activating Hold Mode, you can lock the current temperature for any duration until manually changed. **ATMOZ** gives your home the comfort that you deserve.

Electronic Prog. Thermostat CLEAR TOUCH Series



K302PE



K312RELAY

- 7 day programmable
- Modern design with clear Acrylic panel
- Touch sensitive buttons
- Large LCD display with blue backlight
- Temperature lock feature: set a min & Max temp limit
- Save up to 28% on your heating costs
- 3 minute cycle rate reduces temperature swings
- Complies with all codes requiring anticipated/electronic thermostats
- System On/Standby switch



The ClearTouch™ Electronic 7 Day Programmable Thermostat

King's ClearTouch K302PE combines user-friendly touch sensitive buttons with a sleek modern design, offering unparalleled user comfort control. ClearTouch is an energy-saving fully programmable solution for providing highly accurate temperature control for line voltage electric heaters. It's highly accurate sensing technology saves up to 28% on heating costs. Program a full 7 day schedule with ease for total room control.

Ordering Information

MODEL	UPC	DESCRIPTION
K302PE	10399	Thermostat Programmable DP 120/208/240V 15A
K312RELAY	10400	Thermostat Slave Relay DP 120/208/240V 15A

Engineering Specifications

Temperature Range: 41° - 95°F (5° - 35°C) **Accuracy:** +1° F
Max Power: 1800W @ 120VAC (15A)
Max Power: 3120W @ 208VAC (15A)
Max Power: 3600W @ 240VAC (15A)
Sensing Element: Electronic



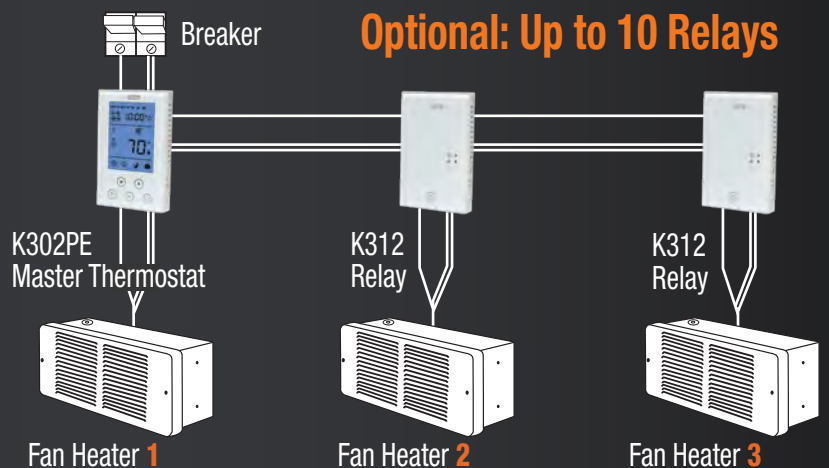
Want To Control Multiple Heaters?

K302PE thermostats are compatible with K312RELAY (Shown Below) to extend the heating zone beyond 15A & control from one master location.

ClearTouch™



K312RELAY



- Add up to 10 Relays to extend the heating zone
- Settings controlled by master thermostat
- Receives signal & activates heat when required
- ♦ ON/STANBY switch to disable heating independently



Electronic Non-Prog. Thermostat CLEAR TOUCH Series



K322E



K312RELAY

- Simple Up & Down temperature selection
- Electronic sensing for accurate temperature control ($\pm 1^\circ\text{F}$, $\pm 0.5^\circ\text{C}$)
- Modern design with clear Acrylic panel
- Touch sensitive buttons
- Large LCD display with blue backlight
- Temperature lock feature: set a min & Max temp limit
- Save up to 15% on your heating costs
- 3 minute cycle rate reduces temperature swings
- Complies with all anticipated/electronic codes
- System On/Standby switch
- Dual Voltage – 120V or 208/240V



The ClearTouch™ Non-Programmable Electronic Thermostat

King's ClearTouch K322E combines user-friendly touch sensitive buttons with a sleek modern design, offering simple control of a room's temperature. ClearTouch's electronic sensing, provides highly accurate temperature control ($\pm 1^\circ\text{F}$, $\pm 0.5^\circ\text{C}$) for line voltage electric heaters, saving up to 15% on your heating costs.

Ordering Information

MODEL	UPC	DESCRIPTION
K322E	40360	Thermostat Non-Programmable 120/208/240V 15A
K312RELAY	10400	Thermostat Slave Relay DP 120/208/240V 15A

Engineering Specifications

Temperature Range: 41° - 95°F (5° - 35°C) **Accuracy:** +1° F
Max Power: 1800W @ 120VAC (15A)
Max Power: 3120W @ 208VAC (15A)
Max Power: 3600W @ 240VAC (15A)
Sensing Element: Electronic



Want To Control Multiple Heaters?

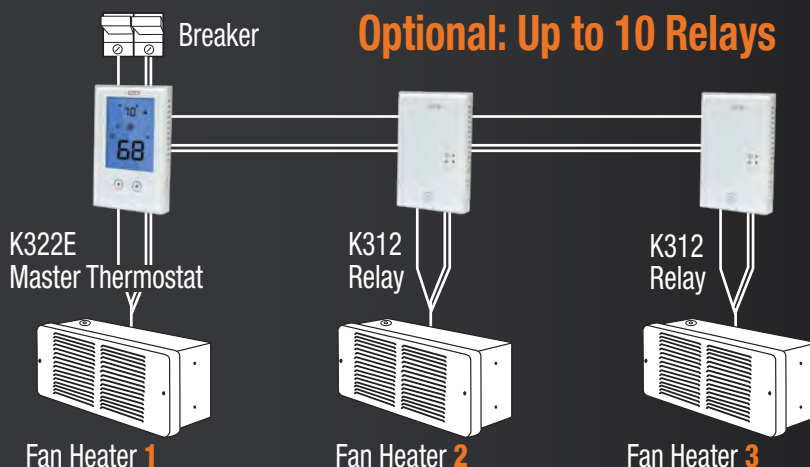
K322E thermostats are compatible with K312RELAY (Shown Below) to extend the heating zone beyond 15A & control from one master location.

ClearTouch™



K312RELAY

- Add up to 10 Relays to extend the heating zone
- Settings controlled by master thermostat
- Receives signal & activates heat when required
- ON/STANBY switch to disable heating independently



Personalized Presets SIMPLSTAT Series



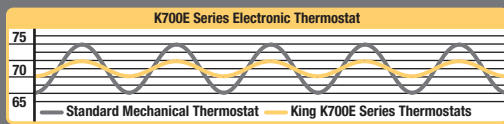
SIMPLSTAT



- 3 programmable presets (Home / Away / Sleep)
- Single pole battery powered or double pole line voltage
- Large back-lit Display for easy viewing
- Temperature range 41° - 95°F (5° - 35°C)
- Clean, beveled style suits any décor
- Electronic sensing for accurate temperature control ($\pm 1^\circ\text{F}$)
- For use on baseboard, fan forced & radiant electric heaters
- Large back-lit buttons allow easy temperature adjustment
- Fully vented cover allows air sensing in all directions
- Mounts directly to a single gang vertical electrical outlet box
- 1-year limited warranty

The SIMPLSTAT Electronic Thermostat with Personalized Presets

No Programming Required. Featuring a user-friendly interface of 3 oversized, back-lit preset temperature buttons that can be personalized (Home / Away / Sleep). Simply press the custom comfort preset button that applies and have confidence that the room will reach optimal temperature within minutes. Combining industry leading temperature sensing technology with a modern sleek design, King's K700E series achieves lower energy consumption with higher comfort levels by reducing temperature swings as compared to economy models.



Ordering Information

MODEL	UPC	DESCRIPTION
K702E-2	10393	208/240V, 2P Line Voltage Electronic Thermostat
K701E-B	10392	120/208/240V, 1P AA Battery Powered Electronic Thermostat (Batteries included)

Engineering Specifications

Temperature Range: 41° - 95°F (5° - 35°C) **Accuracy:** $\pm 1^\circ\text{F}$
Max Power: 1920W @ 120VAC (16A) *K701E-B Only
Max Power: 3328W @ 208VAC (16A)
Max Power: 3840W @ 240VAC (16A)
Sensing Element: Electronic



SIMPLSTAT Interface

Push Button To Select Status



Home

70°



Away

55°



Sleep

60°

*Default Settings

Simple, Real-Time Control. Simply press the custom comfort temperature button that applies and have confidence that the room will reach optimal temperature within minutes. Right out of the box, use the factory-default temperatures or personalize by simply updating the defaults with new personalized comfort settings.



Electronic Thermostat ES120/ES230/ESP230



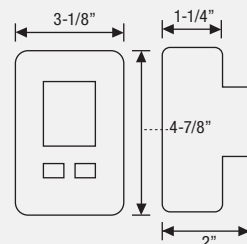
**ES120
ES230**
Non Programmable



ESP230
Programmable



Dimensional Data



- ES saves up to 15% on your heating costs
- ESP saves up to 28% on your heating costs
- Even temperature control
- 3-wire installation
- LCD display of room temperature
- Red LED heater ON indicator
- Comfort color back light display (Red at 75°F / Blue at 65°F)

- Electronic temperature sensing is the most accurate technology
- 3 minute cycle rate reduces temperature swings and increases comfort at all control settings
- Complies with all codes requiring anticipated or electronic thermostats
- Single pole design with third wire to power display
- Shallow design allows more wiring room inside full electrical boxes
- Available in 120V or 208/240V
- System On/Off switch

- 1 year warranty

Ordering Information

MODEL	UPC	TYPE	WIRE LEADS	VOLTS	AMPS	TEMP. RANGE
ES120-R	10372	Electronic Line Voltage	3 Wire	120	22	40°F-95°F
ES230-R	10374	Electronic Line Voltage	3 Wire	208/240	22	40°F-95°F
ESP120-R	10378	7-Day Programmable	3 Wire	120	22	44°F-95°F
ESP230-R	10380	7-Day Programmable	3 Wire	208/240	22	44°F-95°F

The ES Electronic Thermostat

This line voltage thermostat is one of-a-kind in features then improved with memory backup for power outages. All the features you want with only two buttons. Simple has always been better. Two keys on the front control the temperature up and down. With comfort color back lighting and an on/off switch to control the illumination and system. Comfort color back light display is blue at 65°F and red at 75°F and varies in color between making it quick and easy to know your temperature. The illuminated LCD display can be read across the room making it easy to see at night. Simple, accurate control is the goal of the ES model. No fancy programming, just dependable temperature control for your home, saving money on your heating bills.

The ESP Electronic Programmable

This thermostat took years to develop and has become a popular model. All the features you want without too many buttons. Simple is always better. We have added backlighting to the full-size display and an on/off switch to control the illumination. On the front two simple buttons control the temperature up and down, while all the programming keys are hidden under the front cover, protected from wandering, unauthorized fingers. Comfort and convenience is always our primary goal at King.

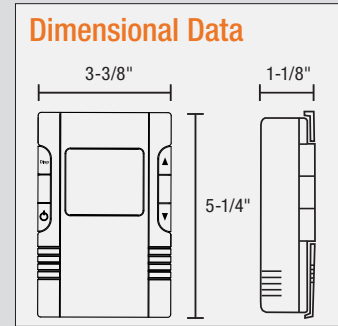
ES Technical Specifications

- Temperature Range:** 40°F - 95°F (4°-35°C)
- Temperature Default:** Your saved setting
- Display Format:** LCD
- Illumination:** Blue/Red LED
- Sample Rate:** Every 60 seconds
- Room Temp. Display:** Large LCD
- Delay:** 3 minutes on or off
- Accuracy:** NEMA TEST 1.5°F @ 22 Amps, 1.4°F @ 16 Amps, 1.2°F @ 10 Amps, 0.9°F @ 4.2 Amps
- Power Source:** 120 VAC (ES120), 208/240 VAC (ES230), 50 - 60Hz
- Battery Backup**
 - 22 Amps at 240V, 5280 Watts
 - 22 Amps at 208V, 4576 Watts
 - 22 Amps at 120V, 2640 Watts
 - Wire leads #12 AWG
 - 40°F to 95°F set point range
 - Electronically anticipated
- 120V or 208/240V models only
- Digital thermometer/set point
- Meets energy requirements
- Three wire installation
- Snap action relay built-in
- 30 Amp relay
- 3 min. delay between cycles
- For use on all types of electric heaters, fan-forced, baseboard, radiant, etc.
- Single button operation
- Thermistor sensor
- Contemporary styling
- LCD display
- 1.5 degrees maximum
- 3/4" depth into wire box
- On/Off switch for back light
- On/Off switch for system

ESP Technical Specifications

- Temperature Range:** 44°F - 95°F (7°-35°C)
- Temperature Default:** Your saved setting
- Display Format:** LCD
- Illumination:** Green LED
- Sample Rate:** Every 60 seconds
- Room Temp. Display:** Large LCD
- Delay:** 3 minutes on or off
- Accuracy:** NEMA TEST 1.5°F @ 22 Amps, 1.4°F @ 16 Amps, 1.2°F @ 10 Amps, 0.9°F @ 4.2 Amps
- Power Source:** 208/240 VAC (ES230), 50 - 60Hz
- 22 Amps at 240V, 5280 Watts
- 22 Amps at 208V, 4576 Watts
- 22 Amps at 120V, 2640 Watts
- Wire leads #12 AWG
- 44°F to 95°F set point range
- Electronically anticipated
- 120V or 208/240V models only
- Digital thermometer/set point
- Meets energy requirements
- Three wire installation
- Snap action relay built-in
- 30 Amp relay
- 3/4" depth into wire box
- Single button operation
- Thermistor sensor
- Contemporary styling
- LCD display
- 1.5 degrees maximum
- 3 min. delay between cycles
- For use on all types of electric heaters, fan-forced, baseboard, radiant, etc.
- On/Off switch for backlight
- On/Off switch for system
- Battery backup

Programmable Thermostat WR/WRP



- **Models available:**
 - WR230: simple electronic thermostat
 - WRP230: adds 7 day programming
- Temperature range: 40° to 75°F (4° - 24°C)
- Power failure Restart: occupant's set point
- Display Format: Liquid Crystal Display (LCD)
- Remote-Controlled Set Back: yes (volt-free)
- Occupancy Sensing - 1, 3 or 6 hour delay
- Window Activation: OFF (on display)
- 40°F (4°C) set back when window is open
- 60°F (14°C) Unoccupied temp
- Relay Rating: 16 Amps resistive or inductive
- Illumination: Seattle blue, on touch of key
- Heat Indicator: LCD, "Heater On"
- Sample Rate: 1 minute
- Delay On Or Off: 2-3 minutes
- Accuracy: ±.9°F
- Max Watts: @ 208/240V = 3320/3840
- Minimum Watts: zero
- Power Supply: 120 or 208/240 Volts
- 150 ft total loop distance

Ordering Information

MODEL	UPC	TYPE	PACKAGING	WIRE LEADS	VOLTS	AMPS	TEMP. RANGE
WR120-B	19183	Electronic Line Voltage	Single Box	3 Wire	120	16	40°F-75°F
WRP120-B	19182	Electronic Line Voltage	Single Box	3 Wire	120	16	40°F-75°F
WR230-B	19181	Electronic Line Voltage	Single Box	3 Wire	208/240	16	40°F-75°F
WRP230-B	19180	Electronic Line Voltage	Single Box	3 Wire	208/240	16	40°F-75°F

The WRP Series WINDOW WATCHER Thermostat

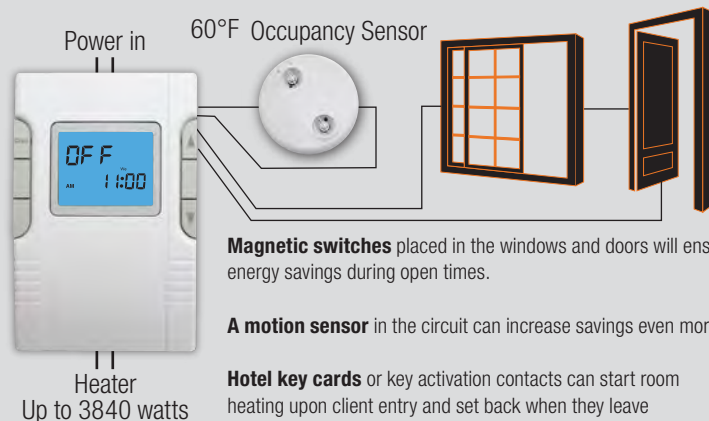
Residential housing projects, motels, and ski resorts often face unnecessarily high and very costly energy bills when windows and/or doors are left open for long periods of time, usually with the heating system on. Until now little could be done to curb this energy waste and expense. Introducing the WINDOW WATCHER™ thermostat, the newest addition to King's energy saving product line. This thermostat is designed to reinforce positive energy habits while limiting landlord energy expenses. With a maximum temperature of 75° the WINDOW WATCHER™ can be customized to your energy saving goals. Sensors placed in a window or door allow this smart thermostat to monitor when they are open. When the volt-free remote contacts are opened the WINDOW WATCHER™ will automatically set the thermostat back to 40°, instantly saving you money! When the window or door is closed the thermostat will automatically return to the originally set comfort temperature. An optional occupancy sensor in line allows the WINDOW WATCHER™ to set the thermostat back when a room is unoccupied, potentially saving you even more. Motels can use contacts that are key card or key activated to begin room heating when the room is occupied, keep the heat to a minimum when unoccupied. How smart and cost effective is that?! Window open set back is clearly displayed on the large back-lit LCD screen when "OFF" appears. That is when you know money is staying in your pockets, not flying carelessly out the window! With no user hold or bypass possible, the WINDOW WATCHER™ is the perfect temperature control anywhere you can not monitor but need to. The WINDOW WATCHER™: real world, confirmed energy savings. Helping to save our resources and curb less desirable energy habits.

How It Works

Small bell-type wire, 90°C (22 gauge) connected to the back of this thermostat senses if a window or door is open.

Simple magnetic switches used in alarm systems can be used as the contacts. Combined with occupancy sensors potential savings are maximized.

WINDOW WATCHER

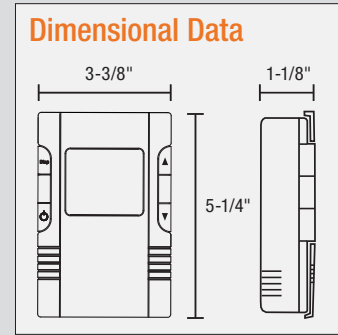


Magnetic switches placed in the windows and doors will ensure energy savings during open times.

A motion sensor in the circuit can increase savings even more.

Hotel key cards or key activation contacts can start room heating upon client entry and set back when they leave

Two Circuit Thermostat HP Series



- 7 day programming
- Save Up to 28% on heating costs
- Dual single pole design with 4 wires
- Easy dial program operation
- Snap action relays
- Shallow design allows more wiring room inside full electrical boxes
- 3 minute cycle rate reduces temperature swings
- Even temperature control
- Power Failure Restart: occupant's set point
- Complies with all codes requiring anticipated or electronic thermostats
- Heat Indicator: LCD, "Heater On"
- White color with gray print
- Accuracy: $\pm 9^{\circ}\text{F}$
- Battery Powered AA

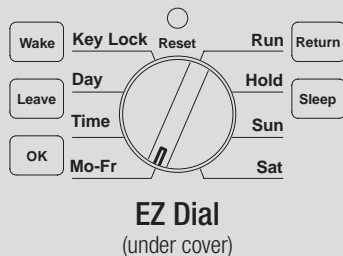
Ordering Information

MODEL	UPC	TYPE	PACKAGING	WIRE LEADS	VOLTS	AMPS	TEMP RANGE
HP30	19068	Electronic Line Voltage	Single Box	4 Wire	120/208/240	16 per pole	40°F-93°F

The HP Series Thermostat

Two Circuit Thermostat - Allows 2 independent 15 or 20 amp 2 pole circuit breakers to be controlled by one thermostat location. When a large room needs multiple heater circuits but requires one control location.

Featuring a new dial, protected from wandering fingers under the front cover, function selection is an easy twist to the left or right.

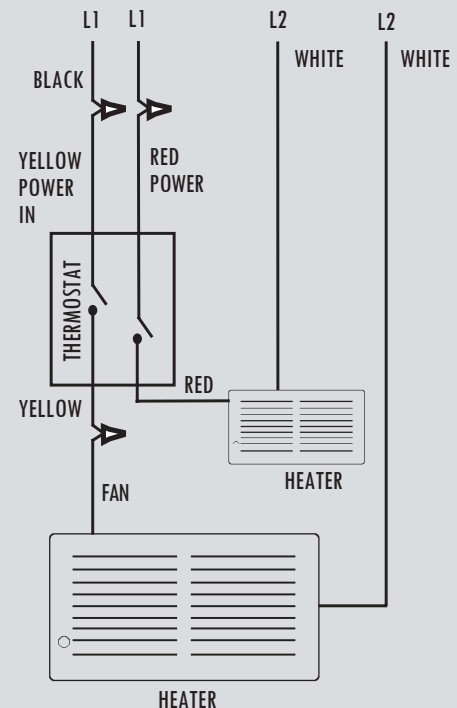


Need to quickly raise or lower the heat? Just push the up or down arrows. Tap the display button to show time, set point or current temperature. This smart thermostat will conveniently tell you by LCD icon when to change the batteries! At King we know what you want and always strive to give it to you.

OPERATION SCHEMATIC

TWO CIRCUIT
16 AMPS MAX. PER CIRCUIT

2 Independent 2-Pole Breakers



Specifications

Temperature Range: 40°F - 93°F (4°-34°C)

Temperature Default: Programs Set Point

Display Format: LCD

Display Size: Large Format

Illumination: Seattle blue, on touch of key

Sample Rate: Every 60 seconds

Delay On: 1 second for relay 2

Heat Indicator: LCD "heater On"

Relay Rating: 16 Amps x (2) resistive or inductive

Relay: AA battery powered

Mounting: 2x4 electrical box

Accuracy: $\pm .9^{\circ}\text{F}$

Maximum Amps: 16 resistive or inductive

Maximum Watts per Pole:

7700 @ 240V

6656 @ 208V

3840 @ 120V

Minimum Watts: 0

Power Supply: 1 to 240 Volts AC

1 to 30 Volts DC

Installation: Leveling of the thermostat is not required.

Mounting screws are provided. Mount the thermostat about five feet above the floor in an area with good air circulation. Avoid mounting the thermostat where it will be affected by drafts, air from ducts and radiant heat sources such as appliances, the sun or plumbing pipes. Typically the best location is above a light switch for that room.

Autonomous Dual Timed Stat



Timed Heating For Building Managers Timed Occupant Heating

- ✓ Rental Apartments
- ✓ Student Housing
- ✓ Vacation Rentals
- ✓ Air BnB
- ✓ Motels



- 2 preset setback temperatures
- 2 preset times Minor & Major
- Simple 2 button operation
- Double Pole Line Voltage
- Max room temp set point of 74°F Min 55°F
- Simple 2 button operation
- Electronic sensing for accurate temperature control ($\pm 1^\circ\text{F}$)
- For use on baseboard, fan forced & radiant electric heaters
- Manual temperature range 55° - 74°F (5° - 24°C)
- Fully vented cover allows air sensing in all directions
- Mounts directly to a single gang vertical electrical outlet box
- 1-year limited warranty

Autonomous Dual Timed Electronic Thermostat with Setback Presets

No Programming Required, Timed Comfort with tenant able to raise the temperature. Two selectable timed, minor and Major set-back temperatures, The minor setback allows for comfort up to 74 degrees for 1, 2, 3, 4, 8, 12, 16 hours before setting back to 66, 62, or 58 degrees, Major setback happens in 12, 24, 48, 36 or 60 hours and drops the temperature back to 58, 50, or 40 degrees. Simple jumper pins on the circuit board allow you to select the times and the temperatures for your application.

*Consult factory regarding options for custom time and temperature setbacks. MOQ would apply.

Ordering Information

MODEL	UPC	DESCRIPTION
K702E-DTSB		208/240V, 1P Line Voltage Electronic
Set Back Temperatures		
Minor		Major
66, 62, 58		58, 50, 40
Times: 1, 2, 3, 4, 8, 12, 16		Times: 12, 24, 36, 48, 60

Engineering Specifications

Single Pole 3 Wire
Temperature Range: 55° - 74°F (5° - 24°C) **Accuracy:** $\pm 1^\circ\text{F}$
Max Power: 3328W @ 208VAC (16A)
Max Power: 3840W @ 240VAC (16A)
Sensing Element: Electronic
 16 Amp 3850 Watts

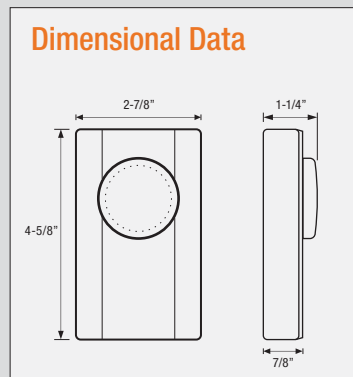


Auto-Double Setback Stat Reduces Energy Waste

Ideal for building managers of dorms and multi-family housing motel & hotel units. Reduces energy waste by automatically setting back the room temperature. Tenant sets the desired room temperature, after a few hours the temperature automatically sets back to the Minor set point. After many hours of no temperature adjustment it sets back to the Major set point.



Line Voltage Thermostat K101, K102 & K101-C



- Clean, beveled style suits any decor
- Sits flush against wall
- Includes °C and °F control dials
- Bi-metal mechanical sensing element
- Operates 41° - 90° F (3°- 32°C)
- Mounts directly to a 2x4 inch vertical electrical outlet box
- Large knob allows easy adjustment to all temperatures
- Single or Double Pole (positive off) available
- No ground wire design
- 1-year limited warranty



The K101 & K102 Series Thermostats

The K101 & K102 Series thermostats have a larger, more sensitive, mechanical bi-metal sensor that improves temperature accuracy to $\pm 3^\circ$ F. This feature achieves a better comfort level with a reduced temperature swing as compared to economy models. Modern appearance with large knob for easy adjustments. No ground wire required, making installation fast and easy.

The K101-C Cooling Thermostat

The K101-C cooling thermostat has a larger, more sensitive, bi-metal sensor that improves temperature accuracy to $\pm 3^\circ$ F. This feature achieves a better comfort level with a reduced temperature swing as compared to other mechanical thermostat models. Modern appearance with large knob for easy adjustments. No ground wire required, making installation fast and easy. For cooling only.

Ordering Information

MODEL	UPC	DESCRIPTION
K101	20576	Single Pole - WHITE
K101-R	20626	Single Pole - WHITE, RETAIL
K101A	20525	Single Pole - ALMOND
K102	20623	Double Pole (Positive Off) - WHITE
K102-R	20627	Double Pole (Positive Off) - WHITE, RETAIL
K102A	20624	Double Pole (Positive Off) - ALMOND
K101-C	20631	Single Pole - WHITE, Cooling Only

Specifications

Temperature Range: 41° F-90° F (5° C- 32° C)

Accuracy: $\pm 3^\circ$ F (1.6°C)

Max Power: 2640W@ 120VAC (22A)

Max Power: 4576W@208VAC (22A)

Max Power: 5280W@ 240VAC (22A)

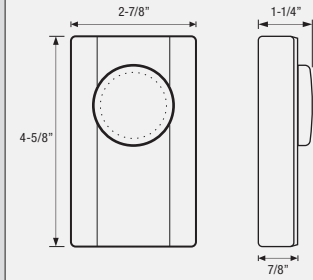
Max Power: 6094W@ 277VAC (22A)

Sensing Element: Bi-metal mechanical

Line Voltage Cooling Thermostat K101-C



Dimensional Data



- For line voltage cooling applications
- Clean, beveled style suits any decor
- Sits flush against wall
- Includes °C and °F control dials
- Bi-metal sensing element
- Mounts directly to a 2x4 inch vertical electrical outlet box
- Fully vented cover allows air sensing in all directions
- Large knob allows easy adjustment to all temperatures
- Single Pole, Operates 41° - 90° F (3°- 32°C)
- No ground wire design

The K101-C Cooling Thermostat

The K101-C cooling thermostat has a larger, more sensitive, bi-metal sensor that improves temperature accuracy to $\pm 3^\circ$ F. This feature achieves a better comfort level with a reduced temperature swing as compared to economy models. Modern appearance with large knob for easy adjustments. No ground wire, making installation fast and easy. For cooling only.

Ordering Information

MODEL	UPC	DESCRIPTION
K101-C	20631	Single Pole - WHITE, Cooling Only

Specifications

Temperature Range: 41° F-90° F (5° C- 32° C)

Accuracy: $\pm 3^\circ$ F (1.6°C)

Max Power: 2640W@ 120VAC (22A)

Max Power: 4576W@208VAC (22A)

Max Power: 5280W@ 240VAC (22A)

Max Power: 4986W@ 277VAC (22A)

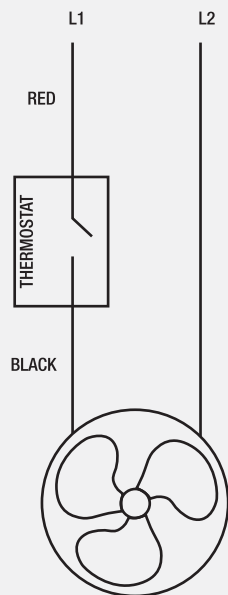
Sensing Element: Bi-metal

Certification:



Installation

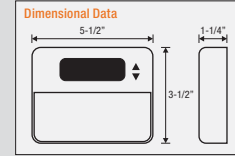
Single Pole wiring
K101-C



Specialty Thermostats EP3-1F56W/1F57/1E30 - N.E.M.A. 4X



EP-3 Series
Electronic Programmable Thermostat



- Preprogrammed: energy saving 5-1-1 schedule, four time periods per day
- Separate baseplate to aid installation
- Battery operated: allows maximum system compatibility (two "AA" batteries included)
- Energy usage monitor: keeps track of actual operational time
- Hold mode operation: allows for manual operation. May be used for vacation setback
- Detailed wiring diagrams and instructions
- 1-year limited warranty

Ordering Information

MODEL	UPC	VOLTS	TYPE	TEMP. RANGE
EP-3	10370	24	Programmable, LCD Display - white	50°F - 90°F

Specifications

Temperature Range: 50°F to 90°F (10°C to 32°C)

Electrical Load Limit: 1.0 Amps at 24 VAC / DC

Compressor Protection Delay: 4 minutes

Temperature Display: Selectable Celsius or Fahrenheit

Time Display: Selectable 12 or 24 hour

Temperature Differential Fahrenheit:

Preset: = 3° : 2° above, 1° below set point

Selectable: 1° to 18° : +0° to 9°, -0° to 9°.

Temperature Adjustment: 1°

Display Range: 32°F to 99°F, ±2°F

Control Range: 44° to 95°F (7°C - 35°C)

Heating Unit Switch: E - Fan controlled by thermostat;

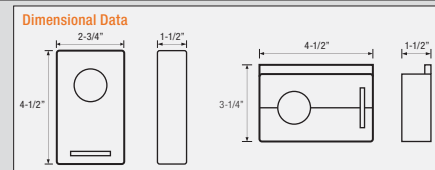
G - Fan controlled by heating unit

System Switch: 3 position (COOL - OFF - HEAT)

Fan Switch: 2 position (ON - AUTO)



1F56W/1F57/1E30 Series
Low Voltage Thermostats



- Heating and cooling anticipators provide narrow differential control of room temperature
- Snap-on cover with clear faceplate
- Accessories available: adapter plates to allow mounting to vertical or horizontal junction boxes and to cover wall blemishes
- Removable faceplate for easy cleaning
- Beige case with gold and black dial
- 1 year warranty

Ordering Information

MODEL	UPC	VOLTS	TYPE	TEMP. RANGE
1E30-910	19000	24	Mercury Free, Vertical Mount - beige	50°F to 90°F
1F56W-444	19010	24	Mercury Free, Heat / Cool / Fan, Horizontal - white	50°F to 90°F
1F57-312	19015	24	Two Stage Heat Plus Fan Only	50°F to 90°F

Specifications

Temperature Range: 50°F to 90°F (10°C to 32°C)

Temperature Default: 55°F or 68°F (13°C or 20°C)

Display: 5° increments

Rate: 2 cycles per hour

Accuracy: ±3°F

Power Source: 24 VAC

• Three wire installation

• Snap action switch

• Flexible wire leads

• 50° to 90°F (10°C - 32°C)

• Anticipated (resistor style)

• Large bi-metal sensor

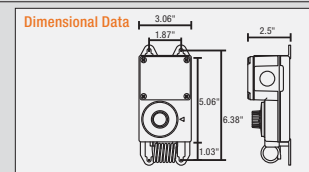
• Meets most energy codes

• For use on all types of electric heater relays; fan-forced, baseboard, radiant

with 24 Volt control circuits



TF115 NEMA 4X
Industrial Control



- One control for heating & cooling, makes use centralized & easy.
- Large, visible dial, making set point temperatures clear.
- UL listed & CSA certified.
- Rugged, weather resistant enclosure, enabling placement most anywhere.
- Tolerates moist conditions, performs despite water spray, high humidity, airborne contaminates & moderately corrosive conditions.
- Enclosures comply with N.E.C. Article 547, giving code compliance peace-of-mind.
- Built from corrosion resistant materials, allowing long life & reliable performance in most demanding climates.

Ordering Information

MODEL	UPC	TYPE	VOLTS	AMPS	TEMP. RANGE
TF115	19150	N.E.M.A. 4X Heating or Cooling Thermostat - Single Pole, Double Throw	120/240/277/480	25	40°F-100°F

Specifications

Amperage:

Full load -25 Amps at 120/240/277VAC;

Control: One stage heat or cool

Switch: single pole double throw

Construction: 2-piece weather resistant plastic enclosure and stainless steel exposed parts.

Ground: Leadwire

Listing: U.L., C.S.A. & N.E.M.A.

Temp: 40° - 100°F (4°C - 38°C)

• N.E.M.A. 4X enclosure complies with N.E.C. Article 547 when used with appropriate watertight connections.

• Rugged weather-resistant enclosure made of corrosion resistant materials for long life.

• One control for both heating and cooling applications

• Low mass, high surface area of stainless steel coiled sensor provides rapid response to temperature change.

• Multi-positional mounting offers flexibility in either new or existing installations.

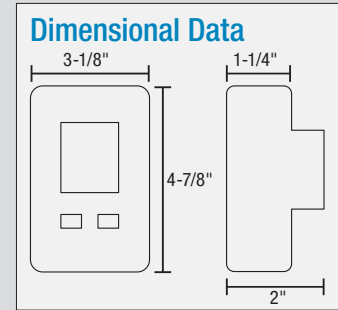
Hydronic Thermostat HW, HWP & HWPT



HW120
Non Programmable
For Hydronic Heaters



HWP120
Programmable
For Hydronic Heaters
HWPT120
Programmable
Adds Timer for Pump



- Save up to 15% on your heating costs (HW)
- Save up to 28% on your heating costs (HWP/HWPT)
- Even temperature control
- Pre-programmed
- LCD backlight display with temperature
- Green backlight display
- Push button temp. settings
- 1 year warranty
- Electronic temperature sensing is the most accurate technology
- 3 minute cycle rate reduces temperature swings and increases comfort at all control settings
- Complies with all codes requiring anticipated or electronic thermostats
- Single pole design with third wire to power display
- Shallow design allows more wiring room inside full electrical boxes
- 2 circuits, 1 minute delay on 2nd circuit
- HWPT adds pump exerciser for potable water applications



Ordering Information

MODEL	UPC	TYPE	WIRE LEADS	VOLTS	AMPS	TEMP. RANGE
HW120	19048	Electronic Line Voltage	4 Wire	120	12.5	40°F-95°F
HWP120	19047	7 Day Independent Electronic Programmable	4 Wire	120	12.5	44°F-95°F
HWPT120	19049	7 Day Ind. Elec. Prog. w/ 15 min. pump timer every 24 hrs.	4 Wire	120	12.5	44°F-95°F

The HW Non Prog. Electronic Thermostat

The HW (hot water) Series was intended for use as a 2 circuit thermostat controlling a circuit pump and fan on a hydronic coil heating system, though it could be used when needing a 2 circuit control with 1 minute delay on the second circuit. This control solves the historic problem of using a standard 22 Amp bi-metal heating thermostat on a hydronic system which require high Amp loads to be accurate. Without a load they will not shut off properly, continuing to circulate hot water when not needed. This control positively controls both circuits creating energy savings and superior comfort control, while providing excellent hydronic control.

The HWP Programmable Electronic Thermostat

Adds 7 independent day programming with 4 times and temperature settings per day to save energy and also start system before you get home.

The HWPT Programmable Electronic Thermostat

Programmable features plus it adds a 15 minute pump exerciser every 24 hours as required by code on potable water heating systems. First cycle will start in 12 hours from the power on time so that all cycling will happen at night.

HW Technical Specifications

Temperature Range:
40°F to 95°F (4°C - 35°C)
Temperature Default:
Your saved setting
Display Format: LCD
Display Size: Large Format
Sample Rate: Every 60 seconds
Delay On or Off: 3 minutes
Heat Indicator: Radiant
Relay Rating: 12.5 Amps
Accuracy: ± .9°F @ 1500W
Maximum Amps: 12.5 res. per pole
Maximum Watts: 3000 @ 240V
2600 @ 208V - 1500 @ 120V per pole
Minimum Watts: 0
Power Source: 120VAC, 50-60Hz
• 12.5 Amps per circuit.

- Four wire installation.
- Snap action relays.
- Wire leads #16 AWG.
- ¾" depth into wire box.
- 40°F to 95°F (4°C - 35°C) set point range.
- Thermistor sensor.
- Digital thermometer/set point.
- Large LCD display.
- Meets energy code requirements.
- 1.2 degrees differential.
- 3 min. delay between cycles.
- 1 min. delay between circuits.
- For use on hydronic fan coils.
- On/Off switch for green backlight & system.
- Battery backup.

HWP/HWPT Technical Specifications

Temperature Range:
44°F to 95°F (7°C - 35°C)
Temperature Default:
Your saved setting
Display Format: LCD
Display Size: Large Format
Sample Rate: Every 60 seconds
Delay On or Off: 3 minutes
Heat Indicator: LCD "heater on"
Relay Rating: 12.5 Amps
Accuracy: ± .9°F @ 2000W
Maximum Amps: 12.5 resistive
Maximum Watts: 3000 @ 240V
2600 @ 208V - 1500 @ 120V
Minimum Watts: 0
Power Source: 120VAC, 50-60Hz
• 12.5 Amps per circuit.

- Four wire installation.
- Snap action relays.
- Wire leads #16 AWG.
- ¾" depth into wire box.
- 44°F to 95°F (7°C - 35°C) set point range.
- Thermistor sensor.
- Digital thermometer/set point.
- Large LCD display.
- Meets energy code requirements.
- 1.2 degrees differential.
- 3 min. delay between cycles.
- 1 min. delay between circuits.
- For use on hydronic fan coils.
- On/Off switch for green backlight & system.
- Battery backup.
- HWPT adds exerciser pump timer.

Electronic Hydronic Thermostat HB



2 Circuit Control of Pump & Fan for Hydronic System



Programmable



- Save up to 15% on your heating costs
- Even temperature control
- LCD heater ON indicator
- LCD display with temperature
- White color with gray print
- Tap key temperature settings
- 1 year warranty
- Electronic temperature sensing is the most accurate technology
- 3 minute cycle rate reduces temperature swings and increases comfort at all control settings
- Complies with all codes requiring anticipated or electronic thermostats
- Dual single pole design with three wires
- Shallow design allows more wiring room inside full electrical boxes
- Use on 120/208/240V
- Uses AA batteries



Ordering Information

MODEL	UPC	TYPE	PACKAGING	WIRE LEADS	VOLTS	AMPS Per Pole	TEMP. RANGE
HB	19050	Electronic Line Voltage	Box (50 pieces)	3 Wire	120/208/240	16	40°F-95°F

The HB Electronic Thermostat

This HB Series was intended to be used as a 2 circuit thermostat controlling a circulation pump and a fan on a hydronic coil heating system, though it could have other uses where you need a 2 circuit control with a 1 minute delay on the 2nd circuit. This control will solve the historic problem of using a standard 22 Amp bi-metal heating thermostat on a hydronic system which require high Amp loads to be accurate. Without a load on a Bi-metal thermostat it will not shut off circulating hot water when not needed. This HB control positively controls both circuits creating energy savings, superior control and comfortable living spaces.

Installation

This line voltage device should be installed and serviced by a qualified electrician. The thermostat has been designed to mount to a standard 2" X 4" electrical outlet box. Leveling of the thermostat is not required. Mounting screws are provided. Mount the thermostat about five feet above the floor in an area with good air circulation. Avoid mounting the thermostat where it will be affected by drafts, air from ducts, and radiant heat sources such as appliances, the sun or plumbing pipes. Typically the best location is above a light switch for that room.

Technical Specifications

Temperature Range:

40°F to 95°F (4°C - 35°C)

Temperature Default: 68°F (20°C)

Display Format: LCD

Display Size: Large Format

Sample Rate: Every 60 seconds

Delay On or Off: 3 minutes

Heat Indicator: LCD "heater on"

Relay Rating: 16 Amps

Relay: AA battery powered

Accuracy: ± .9°F @ 2000W

Maximum Amps: 16 resistive

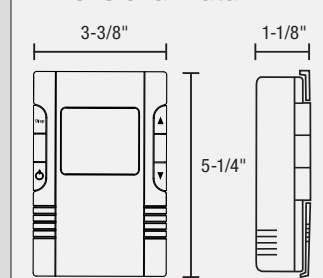
Maximum Watts: 3840 @ 240V -
3328 @ 208V - 1920 @ 120V

Minimum Watts: 0

Power Supply: 1-240VAC / 1-30VDC

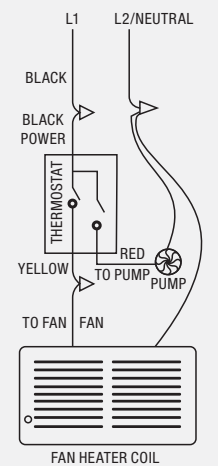
- 16 Amps at 240V, 3840 Watts.
- 16 Amps at 208V, 3328 Watts.
- 16 Amps at 120V, 1920 Watts.
- Three wire installation.
- 2 snap action relays built-in.
- Wire leads #12 AWG.
- No depth into wire box.
- Dual switch operation.
- Electronically anticipated.
- Battery operated by AA batteries
- Thermistor sensor.
- Contemporary styling.
- Digital thermometer/set point.
- LCD display.
- Meets specific energy requirements.
- 1.5 degrees maximum.
- 3 min. delay between cycles.
- For use on hydronic fan coils.

Dimensional Data



Wiring Diagram

120/208/240



Electronic Hydronic Thermostat HBP



2 Circuit Control of Pump & Fan for Hydronic System



Non Programmable



- Save up to 28% on your heating costs
- Even temperature control
- LCD heater ON indicator
- LCD display with temperature
- White color with gray print
- 1 year warranty
- Uses AA batteries
- Electronic temperature sensing is the most accurate technology
- 3 minute cycle rate reduces temperature swings and increases comfort at all control settings
- Complies with all codes requiring anticipated or electronic thermostats
- Dual single pole design with three wires
- Shallow design allows more wiring room inside full electrical boxes
- Flame icon heat indicator, low battery indication



Ordering Information

MODEL	UPC	TYPE	PACKAGING	WIRE LEADS	VOLTS	AMPS Per Pole	TEMP. RANGE
HBP	19051	5+1+1 Day Electronic Programmable	Box (50 pieces)	3 Wire	120/208/240	16	40°F-95°F

The HBP Electronic Thermostat

This HBP Series was intended to be used as a 2 circuit thermostat controlling a circulation pump and a fan on a hydronic coil heating system, though it could have other uses where you need a 2 circuit control with a 1 minute delay on the 2nd circuit. This control will solve the historic problem of using a standard 22 Amp bi-metal heating thermostat on a hydronic system which require high Amp loads to be accurate. Without a load on a Bi-metal thermostat it will not shut off circulating hot water when not needed. This HBP control positively controls both circuits creating energy savings, superior control and comfortable living spaces.

Installation

This line voltage device should be installed and serviced by a qualified electrician. The thermostat has been designed to mount to a standard 2" X 4" electrical outlet box. Leveling of the thermostat is not required. Mounting screws are provided. Mount the thermostat about five feet above the floor in an area with good air circulation. Avoid mounting the thermostat where it will be affected by drafts, air from ducts, and radiant heat sources such as appliances, the sun or plumbing pipes. Typically the best location is above a light switch for that room.

Technical Specifications

Temperature Range:

40°F to 95°F (4°C - 35°C)

Temperature Default: 68°F (20°C)

Display Format: LCD

Display Size: Large Format

Sample Rate: Every 60 seconds

Delay On or Off: 3 minutes

Heat Indicator: LCD "heater on"

Relay Rating: 16 Amps

Relay: AA battery powered

Accuracy: ± .9°F @ 2000W

Maximum Amps: 16 resistive

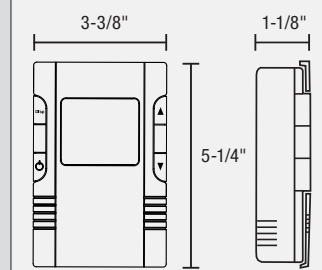
Maximum Watts: 3840 @ 240V -
3328 @ 208V - 1920 @ 120V

Minimum Watts: 0

Power Supply: 1-240VAC / 1-30VDC

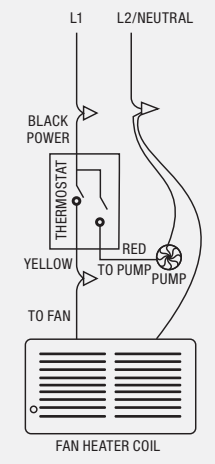
- 16 Amps at 240V, 3840 Watts.
- 16 Amps at 208V, 3328 Watts.
- 16 Amps at 120V, 1920 Watts.
- Three wire installation.
- Snap action relay built-in.
- Wire leads #12 AWG.
- No depth into wire box.
- 40°F to 95°F (4°C to 35°C) set point range.
- Dual switch operation.
- Electronically anticipated.
- Battery operated by AA batteries
- Thermistor sensor.
- Contemporary styling.
- Digital thermometer/set point.
- LCD display.
- Meets all energy requirements.
- 1.5 degrees maximum.
- 3 min. delay between cycles.

Dimensional Data



Wiring Diagram

120/208/240



Heating Cable Thermostats & Controls

In-Floor Heating (3-3.7W/Ft.) & Thermal Storage (6W/Ft.)



**KING
F912GFCI
Slave**



**KING
F902GFCI
Programmable**



**OJ
UWG4-4999
WIFI Programmable**



**WARMUP
4IE04-BLACK/WHITE
WIFI Programmable**



**HONEYWELL/AUBE
TH115-AF-GA
Programmable**



King electronic thermostats are designed to achieve maximum comfort from King cable heating systems. Common feature to all models include:

- Three choices of temperature control: ambient air temperature, floor temperature or ambient air with floor limits.
- Advanced microprocessor optimizes performance by proportionally controlling the wattage to the cable saving energy and maintaining very accurate temperature control within $\pm 1^\circ\text{F}$, 0.5°C .
- Designed for maximum safety, they all include a ground-fault circuit interrupter (GFCI).
- A single touch activates the backlight display indicating the current set point.
- They are multi-volt and can be installed on 120, 208 and 240 volt circuits.

MODEL	UPC	DESCRIPTION
F912GFCI**	30759	King Recommended Slave Unit, 15 Amp, 5mA 120/208/240V, GFCI
F902GFCI**	30758	Electronic Programmable Floor Stat, 15 Amp, 5mA 120/208/240V, GFCI
UWG4-4999	42476	OJ Microline WIFI Touch Thermostat, 15A, 5mA, 120/240V, GFCI
4IE04-BL	42477	WARMUP Microline WIFI Smart Thermostat, 15A, 5mA, 120/240V, GFCI-Black
4IE04-WH	42478	WARMUP Microline WIFI Smart Thermostat, 15A, 5mA, 120/240V, GFCI-White
TH115-AF-GA	38983	Honeywell/Aube Electronic Programmable, 15 Amp, 5mA, 120/208/240V, GFCI

** Must use one F912GFCI slave unit to switch each heating load zone (15A per zone). Must be programmed and controlled by thermostat models F802GFCI or F902GFCI.

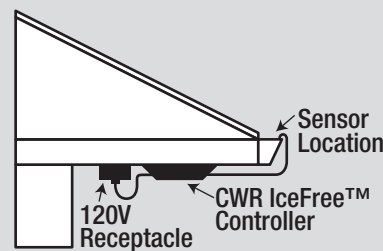
CWR IceFree™ Controller For CWR Constant Wattage Roof & Gutter Cable



CWRK-35



CWR-120 IceFree™



The CWR IceFree™ Controller is designed specifically for use with King's CWR constant wattage roof and gutter De-icing cable. Designed to sense both temperature and the presence of run-off water, ensuring the heating cable only operates when necessary to prevent ice dams and frozen drains. Both conditions must be met or the system does not run, saving on your energy bill and eliminating waste. The CWR IceFree™ Controller is rated at 10 amps at 120V, requiring one unit per cable. 1200W Max. Use with CWR Cable.

- ABS construction
- 120V, Max. wattage 1200W
- Electronic sensor
- Water resistant enclosure

MODEL	UPC	Item	Description
CWR-120	48710	Snow sensor	CWR IceFree Controller with 6 ft. cord and grounded plug
CWRK-35	48732	Accessory Kit	19 Roof Clips & 16 Spacers

**Controls and thermostats should always be used with King heating systems.

SnowFree™ Snow Melt System

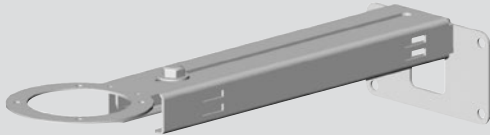
SnowFree™ System



SFC2 SnowFree™ Controller Snow Melt System Kit with Remote Control 2 Zone/24 Amp per Zone



SFC2
2 Zone Controller 24A/2P, 120-240VAC



PYROSB
Mounting Bracket



SFIR
Remote IR Control



Optional: SFMC
Manual Controller

SnowFree™ Controller Snow Melt System with Remote Control

The SFC2 SnowFree System is the ultimate “All in One” Snow Sensor & Controller for light commercial and residential use. A “Plug and Play” controlled for frost protection, ice and snow melt applications. When receiving a signal from the built-in snow sensor, it activates the contactors energizing the heating elements. Based on the configuration and settings, the two outputs to the two zones are activated together or in staggering mode. The outdoor temperature set-point as well as the ambient lower limit temperature can be easily set by the remote control. The Technician Settings mode allows the installer or technician to adjust the parameters for customized installations using the remote control. The adjustable Hold-On (Time delay) is adjustable in the range of 0 up to 48 hours. Installing the system is a quick and easy task. Apart of mounting the metal box to the wall, the installer needs only to connect the line in and line out wires in the marked terminals and the system is ready to work.

- Snow sensor & controller for light commercial and residential use
- Sequencing option between the zones-allowing larger snow melting area with less available power on site
- User friendly programming and setting adjustment using large LCD display remote control
- 1 or 2 zones activation (24A/2P each 120-240 VAC)
- Optional indoor manual control interface—SFMC receiver
- Energy efficient algorithm
- Manual and automatic modes. Selected by physical switch or using the remote control
- Technician testing / commissioning mode for easy and fast system test all year long (even during summer or at high temp)
- Adjustable splitting time between the zones with multi configurations between zones
- Adjustable Hold-ON-OFF delay and manual ON
- Adjustable upper and lower limit temperature
- Adjustable set points

MODEL	UPC	Item	Description
SFC2-KIT	42403	SnowFree System	SFC2 SnowFree Controller with sensor, SFIR SnowFree IR remote, PYROSB Mounting bracket
SFMC (Optional)	42406	Indoor Manual Controller	Wall mounted IR receiver with indication LED's and push button with soft on control cable

**Controls and thermostats should always be used with King heating systems.

PYRO Snow Melt/De-Icing System

PYRO Snow Melt/De-Icing System



PYROBOX5



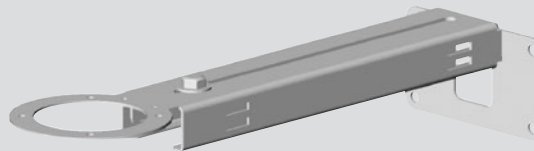
PYROBOX3 & 3C



PYROULS



PYROSENSE



PYROSB



PYROCON12

PYRO De-Icing System

The unique staggering feature of the PYRO control melts snow & ice over larger areas, without the need to upgrade the power supply on site. Use a high demand heating system on a limited power supply source by controlling up to 5 different zones. The modular design allows customers to choose the right configuration for the specific property needs.

Enables use of high demand heating system on a limited power supply source. Modular: Up to 5 circuits/contactors. Up to 600V & 600A

Sequence of zoning 1/2/3/4/ + auxiliary (such as gutter sensor), Suitable for parallel, star & triangle connection. North American consideration operating algorithm.

- User friendly programming and adjusting
- Adjustable cycle time
- Adjustable delay (Hold on Time)
- Adjustable on and off
- Adjustable trip setting
- Non obtrusive adjustable snow sensor
- Integrated Fault Detector. GFCI non class A
- Logical setting for installer / set up & service
- Surface Upper limit adjustable Temperature Sensor
- Integrated option for Universal gutter de-icing sensor
- Programmable & precise snow and ice sensor
- Suitable for electrical & hydronic de-icing installations

MODEL	UPC	Item	Description
PYROBOX3	42329	Power Box 3	4 Zone Controller, 4-30A/2P Contactors, 1-Phase, 277V Max
PYROBOX3C	42328	Power Box 3C	2 Zone Controller, 2-50A/3P Contactors, 3-Phase, 600V Max +1 Zone Aux Controller, 1-30A/2P Contactor, 1-Phase, 277V Max
PYROBOX5	42327	Power Box 5	4 Zone Controller, 4-50A/3P Contactors, 3-Phase, 600V Max +1 Zone Aux Controller, 1-30A/2P Contactor, 1-Phase, 277V Max
PYROSENSE	42323	Snow sensor	Outdoor Snow Sensor
PYROULS	42325	Upper Limit Sensor	Upper Limit Temperature Sensor
PYROCON12	42322	Main Controller	Controller and User Interface panel
PYROSB	42326	Mounting Bracket	Wall mounting adjustable rust free holding bar
PYROSENSE 2/3/4	42324	Snow/Ice Sensor with Numerical Address	Option for Installations Where More Than One Snow Sensor Needed

PYROBOX units are complete with PYROCON12 controller and PYROULS. Order PYROSENSE and PYROSB separately.

**Controls and thermostats should always be used with King heating systems.

PYRO Snow Melt/De-Icing System

PYRO Snow Melt/De-Icing System



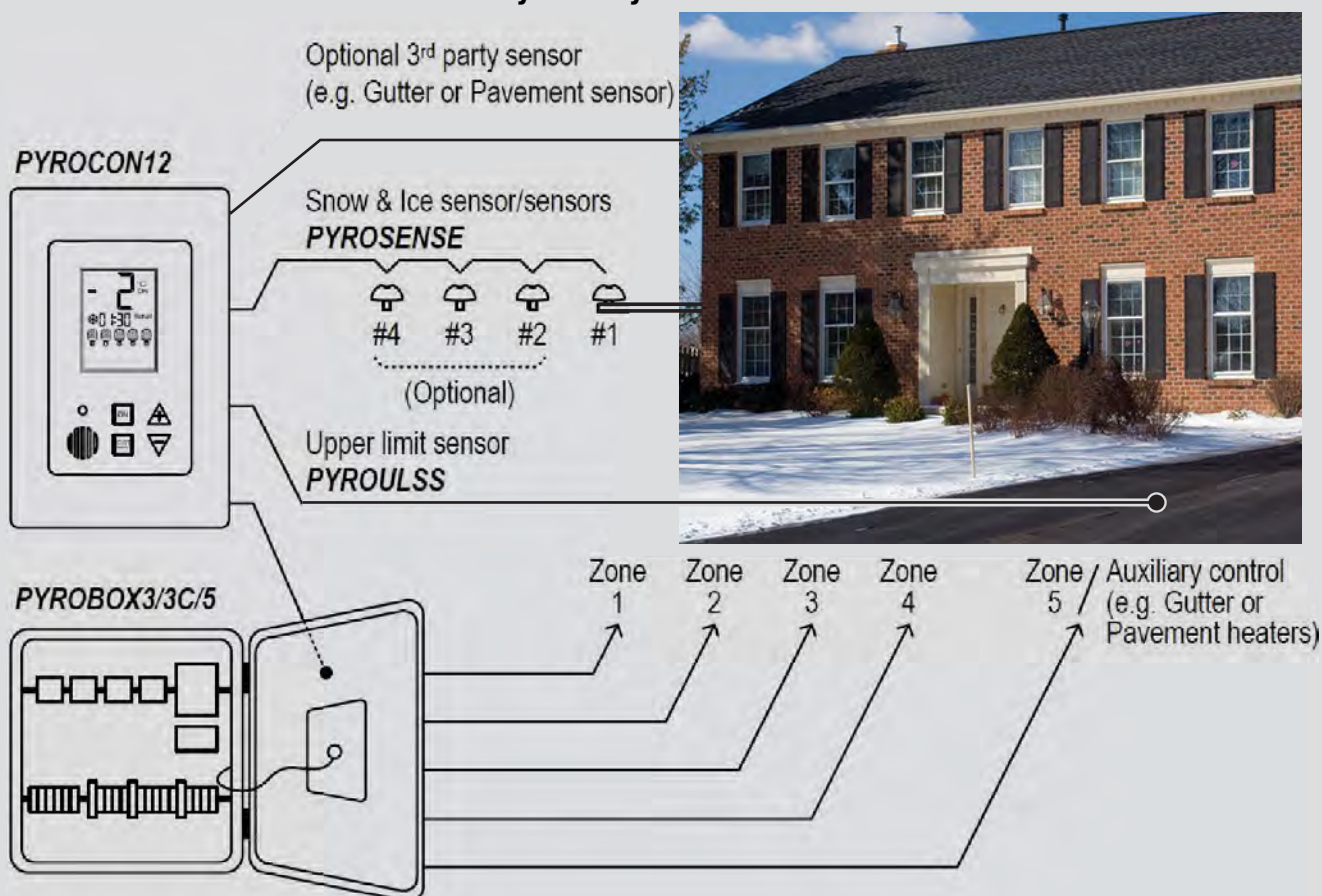
PYROBOX5 PYROBOX3 & 3C

The PYROBOX3/3C/5 power boxes together with the PYROCON12 controller and interface panel, offer smart and easy control over the PYRO snow & ice melting system. It can operate up to 4 snow melting zones and one auxillary zone, with selectable sequencing method. Typical applications include driveways, sidewalks, loading docks, stairs, pavement and gutters. The back-lit LCD screen provides full interface and information of the system status. The use of several zones staggering allow covering larger area for snow melting with a limited available electrical power.

The PYROCON12 offers various operating and programming options such as:

- Switchable temperature scales (F or °C)
- Both automatic and manual modes
- Adjustable heaters cycle and splitting times
- Adjustable heaters hold on, off & delay
- Optional auxiliary control by 3rd party snow sensor (e.g. Gutter sensor)
- Adjustable lower ambient temperature limit to stop heaters (lockout)
- Energy saving upper temperature limit
- Adjustable snow sensor sensitivity (%Rh)
- Commissioning/Test mode

PYRO-X General System Layout With PYROBOX3/3C/5



PYRO Freeze Protection Controller

PYRO FPC Freeze Protection Controller



FPC-02-120



PYRO FPC Freeze Protection Controller

Freeze Protection Controller and a Power panel for heat tracing, ice and snow melt applications.

When the temperature drops below the pre-defined, adjustable set-points, the contactor is activated energizing the heating elements. The Technician Settings mode enables an installer, or a technician to adjust the parameters for customized installations using the electronic controller installed in the front panel.

- Up to 30A & 120/240V outputs to the heaters
- Hold-On (Time delay) adjustable range of up to 99 hours
- Temperature input from the provided temperature sensor (10 m. / 30 feet long) and also from a 3rd party aquastat
- Integrated electronic controller with backlit LCD display
- Integral 30mA GFEP allows manual reset from the front panel
- Adjustable Set-points, Hold ON/OFF Time delay and manual ON duration
- Manual and Automatic modes, selected by a button
- Testing/commissioning mode for easy and fast system test, all year long (even during summer or at high temperature condition)
- Multiple sensors input-optional
- ETL listed

MODEL	UPC	Item	Description
FPC-02-120	19112	Pyro FPC Freeze Protection Controller	Freeze Protection Controller 120V, 30A, w/GFEP
FPC-02-240	19113	Pyro FPC Freeze Protection Controller	Freeze Protection Controller 240V, 30A, w/GFEP
FPC-02-120-MDB	19114	Pyro FPC Freeze Protection Controller	Freeze Protection Controller 120V, 30A, w/GFEP & MODBUS
FPC-02-240-MDB	19115	Pyro FPC Freeze Protection Controller	Freeze Protection Controller 240V, 30A, w/GFEP & MODBUS

**Controls and thermostats should always be used with King heating systems.



PYRO Pipe Trace System



**Innovative Zone Based Control System For Pipe Trace Heating Cable.
The Ultimate Controller For Industrial, Commercial and Residential.**



PYROBOX5

PYROBOX3 & 3C



PYROULS



PYROCON12 TRACE

PYRO Pipe Trace System

The unique staggering feature of the PYRO TRACE control keeps pipes from freezing, without the need to upgrade the power supply on site. Use a high demand heating system on a limited power supply by controlling up to 5 different zones. The modular design allows customers to choose the right configuration for the specific property needs.

Enables use of high demand heating system on a limited power supply source. Modular: Up to 5 circuits/contactors. Up to 600V & 600A
Sequence of zoning 1/2/3/4/ + auxiliary (such as gutter sensor). Suitable for parallel, star & triangle connection. North American consideration operating algorithm.

- Adjustable temperature sensor
- User friendly programming and adjusting
- Adjustable cycle time between zones
- Adjustable delay (Hold on Time)
- Adjustable on and off
- Logical setting for installer / set up & service
- Second input for temperature switch
- Integrated Fault Detector. GFCI non class A
- Adjustable trip setting
- Non obtrusive adjustable snow sensor
- Electrical and Hydronic freezing applications
- Manual mode

MODEL	UPC	Item	Description
PYROBOX3 TRACE	42388	Power Box 3 Trace	4 Zone Controller, 4-30A/2P Contactors, 1-Phase, 300V Max
PYROBOX3C TRACE	42387	Power Box 3C Trace	2 Zone Controller, 2-50A/3P Contactors, 3-Phase, 600V Max +1 Zone Aux Controller, 1-30A/2P Contactor, 1-Phase, 300V Max
PYROBOX5 TRACE	42386	Power Box 5 Trace	4 Zone Controller, 4-50A/3P Contactors, 3-Phase, 600V Max +1 Zone Aux Controller, 1-30A/2P Contactor, 1-Phase, 300V Max
PYROULS	42325	Upper Limit Sensor	Upper Limit Temperature Sensor
PYROCON12 TRACE	42380	Main Controller	Controller and User Interface panel

PYROBOX units are complete with PYROCON12 TRACE controller and PYROULS.
**Controls and thermostats should always be used with King heating systems.

Controls & Sensors

Roof & Gutter De-Icing Controls



CWR IceFree™



GIT-1



DS-2C /DS-224



DS-8C /DS-824C



CDP-2

MODEL	UPC	DESCRIPTION
DS-2C	42331	Rain/Snow controller w/built-in sensor, 100-277V - 30amp w/Adjustable Temperature Trigger Points, used for snow melt cable projects
DS-5C	42332	Rain/Snow controller w/built-in sensor, 100-277V - 2-30amp w/Adjustable Temperature Trigger Points, used for snow melt cable projects
DS-8	48480	Gutter ice melting controller, NEMA 3R, 120/208/240V, 30amp, adjustable temperature range 34°F to 44°F, 1/2" hub
DS-8C	42335	Gutter ice melting controller, NEMA 3R, 120/208/240/277V, 30amp, adjustable temperature range 34°F to 44°F, 1/2" hub
DS-8/24	40481	Gutter ice melting controller, NEMA 3R, 24V, 30amp, adjustable temperature range 34°F to 44°F, 1/2" hub
DS-9C	42426	Gutter ice melting controller, NEMA 3R, 120/208/240/277V, 2-30amp, adjustable temperature range 34°F to 44°F, 1/2" hub
CDP-2	40482	Indoor sensor control display, manual/auto/standby modes, includes 18" lead
CS-1	40483	Control cable for CDP-2 control panel, 18" lead
CS-50	40484	Control cable for CDP-2 control panel, 50 ft. lead
MG-3	40485	Replacement sensor for DS controller
GIT-1	40508	GIT-1 Gutter De-Icing sensor
CWR-120	48710	CWR IceFree Controller with 6 ft. cord and grounded plug (See Page 1)

Call for availability on additional ETI controls not shown above.

Pipe Freeze Protection



IFC12



TRF115-005

MODEL	UPC	DESCRIPTION
TRF115-005	40486	Freeze protection thermostat, weatherproof with 5 ft. remote bulb & capillary, 25 amp at 120/208/240V, 22 amp at 277V, adjustable temp 0°F, suitable for 24 VAC operation (w/Power-On indicator light)
IFC12	40490	Plug in fixed thermostat, 120V, 15 amp, on at 35°F off at 45°F (12/case)

Call for availability on additional ETI controls not shown above.

Snow Melt Controls



SIT-6E



SMNPLT

MODEL	UPC	DESCRIPTION
SCIT-6E	40505	SIT-6E Pavement Sensor (requires 23832 Pavement Sensor Housing)
23832 Sensor Housing	40506	Pavement Sensor Housing (not pictured)
SMNPLT	40507	Snow Melt Name Plate (per NEC 426.13 requirements)

Call for availability on additional ETI controls not shown above.

A Brief History



1956: In 1956 the electricity industry launched the “Live Better Electrically” (LBE) campaign, featuring a young Ronald Reagan touting the benefits of clean electricity, with the goal of converting American homes to 100% electric power.

1958: By 1958, electric heat was seen as a new frontier. Robert E. Wilson, founder of King Electrical MFG Co. wanted to be part of this new revolution and saw the opportunity to bring high quality all electric heating products to the market. Typical heating systems (coal, oil, and kerosene) were usually dirty, smoky and smelled terrible. Electric heat was the new, clean, flameless heating system, eliminating foul-smelling fuels and requiring no maintenance. After a successfully landing a military housing contract to outfit 5,000 military family homes, King’s electric baseboard heater was born. The public embraced it and millions of homes replaced their huge basement furnace with small baseboard heaters under the windows.



1963: Business was booming and soon KING outgrew its small factory location in South Park, a south Seattle suburb. Seattle had just hosted the 1962 World’s Fair giving millions of Americans their first look at the Pacific Northwest. After the fair one of the international pavilion buildings was moved to a lot close to KING; offices were added and the new KING factory was born.

1968: By 1968, over 30 different manufacturers of electric heat had launched into the business. Many innovations came and went, but only the strongest would survive. King introduces the KB unit heater and KCC cabinet heater product lines.

1970s: KING continued to expand distribution by adding warehouses across the United States to expedite delivery to a rapid growing market share. The international market steadily increased and several large distributors were set up in Canada, South America, and various other countries. King introduces the KFS electric furnace product line.

1984: The first small fan heaters (W series) were developed, again shifting the way Americans heat their homes. With improved air circulation and a compact design, these heaters were quickly becoming the industry standard.



A Brief History

1986: Everything changed with the invention of the Pic-A-Watt® series of heaters. A new class of heaters, that allowed customers to select the exact wattage, tailoring the heater to an area's specific heating requirements. An industry first.

Pic-A-Watt
Selectable Wattage Element®



1999: King develops and introduces the soon to be patented Smart Limit Protection (SLP) safety limit. The safety standard of the industry today.

2007: A big year for KING. Dean Wilson formerly with GE is named CEO, and daily management of the business is now run by brothers Dean, Brad and RJ Wilson. As most competitors move production offshore, KING makes the decision to significantly invest in new automated equipment to keep production in the USA. The C5 Tourette press is purchased allowing for 24/7 sheet metal production. King introduces line of electronic thermostats, the first thermostats in the market designed and built by a heating manufacturer.



2008: King Electric expands product line to include fan-forced hydronic heating.



2010: Construction is finished on 40,000 sqft warehouse and distribution center in Seattle, WA. King launches comprehensive line of Electric Heating Cables.



2013: King launches new industry leading line of Garage Heaters, effectively creating a new category for the electric heat market. King purchases second C5 machine, effectively doubling sheet metal production capacity.



2015: King launches ECO2S 2-Stage Heaters – ECO2S Works Smarter, Not Harder. KING launches the ATMOZ WIFI, connected thermostats with smart phone app control, for line voltage heaters.



2018: King Celebrates our 60 Year Anniversary of Made in America Comfort.

We believe experience matters.



Industrial Heaters • Residential Heaters • Commercial Heaters • Garage Heaters • Marine Heaters • Hydronic Heaters • Electric Furnaces • Heating Cable • Roof/Gutter De-Icing • Thermostats

King: a technology leader.

Since 1958 King Electrical Manufacturing Company has been a leader in the heating industry, with several innovative patents. In this age of corporate conglomeration, big business and a global economy, King is still proudly family-owned.

In our over 60 years of business we have seen exciting changes in the comfort and convenience of heating products. Technology has improved to create exciting new possibilities for innovations in heating systems. King continues to emphasize research and development, product quality and genuine pride to ensure that our customers enjoy the best heating solutions possible.

Residential, commercial or industrial electric heat: at King we anticipate your needs and provide you with the best products and solutions!



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