

Compact Unit Heater KBP ECO2S PRO Series



Model Code:

KBP	24	06	-1	-MB	-ECO2S	-PRO
A	B	C	D	E	F	G

- A: Series
- B: 12 - 120V, 20 - 208V, 24 - 240/208V
- C: Watts (950 to 5700)
- D: -1 = Single Phase
- E: -Mounting Bracket
- F: -ECO2S = 2 Stage Electronic Control
- G: -ECO PRO Controller: 7-Day Programmable Thermostat + Remote Temp Sensor



- Energy-Saving ECO2S electronic controller
- 2-Stage heating
- Eco Pro Controller remote thermostat w/ temperature sensor
- 7-Day Programmable Heating Schedule
- Integrated BMS lockout circuit
- Timer & Summer Fan Only modes
- Compatible w/Optional wired or wireless RF window/door /Occupancy sensors
- Thermostat Temperature Range: 40° to 95°
- 385 CFM output
- Auto Memory Feature: returns units to last settings after power outage
- Permanently lubricated unit bearing motor
- Adjustable louvers to direct air
- Solid riveted construction for consistent, long-term durability
- Seattle Energy Code Compliant
- Built-In fan delay to dissipate heat
- Dual Pic-A-Watt® elements
- Patented Smart Limit® Protection
- Universal wall/ceiling bracket included
- Proudly Made in the USA with U.S. & Global Materials
- 5-Year limited warranty

KBP ECO2S PRO 2-Stage Compact Unit Heater with RF Wireless 7-Day Programmable Remote Thermostat

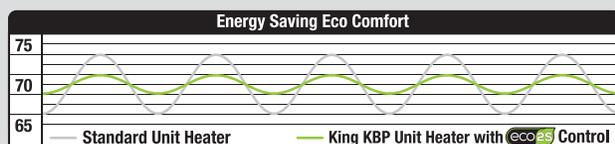
The KBP ECO2S PRO Series Compact Unit Heater delivers exceptional performance, energy efficiency, and advanced user control, featuring King's innovative ECO2S+ 2-stage design paired with the all-new ECO PRO Controller. The heater offers energy-efficient 2-stage heating, an Eco Mode that automatically uses the lowest wattage required, integrated fan-only and timer modes, and intuitive wireless control for effortless operation. **With the new ECO PRO Controller, users gain the flexibility of an RF Wireless 7-Day Programmable Thermostat with an integrated temperature sensor.** The heater monitors room conditions, detects cold spots, and automatically adjusts to maintain consistent comfort. Simply place the ECO PRO Controller on a wall or shelf to ensure the ideal temperature exactly where you need it. The system is compatible with both wired or wireless window/door and occupancy sensors, which help reduce energy waste by setting back the temperature when a space is unoccupied or when a window or door is left open. Multiple heaters can also be paired to a single ECO PRO Controller, creating smart heating zones within a space for optimal comfort and control. Combined with summer fan-only and thermostat timer modes, the KBP ECO2S PRO adapts to your needs year-round. Built for rugged performance, the flow-through design efficiently draws air in from the back and discharges it out the front, quickly heating large spaces. An integral fan delay continues to circulate heat during cool-down, maximizing warmth. King's exclusive dual Pic-A-Watt® steel fin elements provide a range of wattage options, allowing the heater to be precisely tailored to any application.

ECO2S PRO Standard Features:

- Electronic control for accuracy
- Energy-saving automatic 2-stage heating
- 7-Day Programmable Wireless RF Thermostat
- Remote Temperature Sensor
- Create Heat Zones - Connect Multiple Heaters To Single Pro Controller
- Thermostat timer mode (1-9 Hours)
- Fan Only mode
- Built-In fan delay
- Compatible with Option Window, Door & Occupancy Sensors



ECO Pro Controller

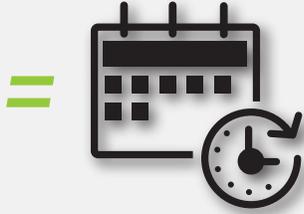


*Reduces temperature swings

Meet the ECO PRO CONTROLLER: 7-Day Programmable Thermostat with Remote Temperature Sensing



Eco Pro Controller



7-Day Programmable Heating Schedule



Balanced Heat Throughout the Space



Comfort, Right Where You Want It



Remote Temperature Sensing

Ordering Information - Electronic 2-Stage Thermostat

MODEL	UPC	PRO CONTROLLER	WATTS	MAX BTUH (000)	PHASE	VOLTS	AMPS	CFM	WT. (lbs.)	TEMP. RISE	AIR THROW	MAX MOUNT HEIGHT
KBP1230-1-MB-ECO2S-PRO	70719	INCLUDED	(2850-1900-950)	9,727	1	120	23.8 - 7.9	385	23°F-8°F	12 ft.	8 ft.	26
KBP2005-1-MB-ECO2S-PRO	70713	INCLUDED	(5000-4000-3600-2290-1450-950)	17,060	1	208	24.0 - 4.6	385	41°F-8°F	12 ft.	8 ft.	26
KBP2406-1-MB-ECO2S-PRO	70714	INCLUDED	(5700-4750-3800-2850-1900-950)	19,454	1	240/208*	23.8 - 4.0	385	47°F-8°F	12 ft.	8 ft.	26

*Approved for 208V operation. Heater will draw 13% less Amps and 25% less wattage

Optional Field-Installed Control Accessories

MODEL	UPC	DESCRIPTION
ECO-PRO-RF-PIR-SENSOR	70422	RF Battery Powered PIR Occupancy Sensor for ECO Models
ECO-PRO-RF-WINDOW-SENSOR	70423	RF Battery Powered PIR Window or Door Sensor for ECO Models
ECO-PRO-CONTROLLER	70421	Replacement Pro Controller - 7-Day Programmable Thermostat/Remote Sensor/Remote

Optional Field-Installed Accessories

MODEL	UPC	DESCRIPTION
KBP-HFD-KIT	70470	KBP Heat/Disconnect Switch, 120-277V, Field Installed Kit
KBP-S2-SMB	70570	Optional Swivel Mounting Bracket
KBP-S2-MB	70571	Replacement Universal Mounting Bracket

Expand Your Control w/ Optional Wireless Sensors For Automatic Temperature Setbacks

eco2s PRO CONTROL

ECO Pro Controller
Programmable 7-Day Heating Schedule & Remote Temperature Sensor

RF Occupancy Sensor (optional)

Room Unoccupied
Setback Options: 45°F, 55°F, 60°F or 65°

or

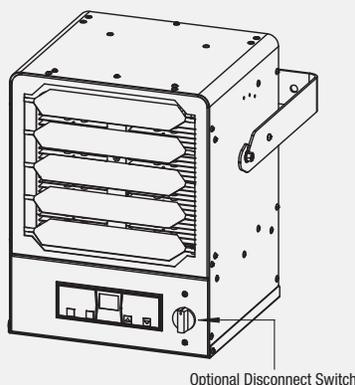
RF Window/Door Sensor (optional)

Open Window or Door
Setback Options: 40°F, 45°F, 50°F or 55°

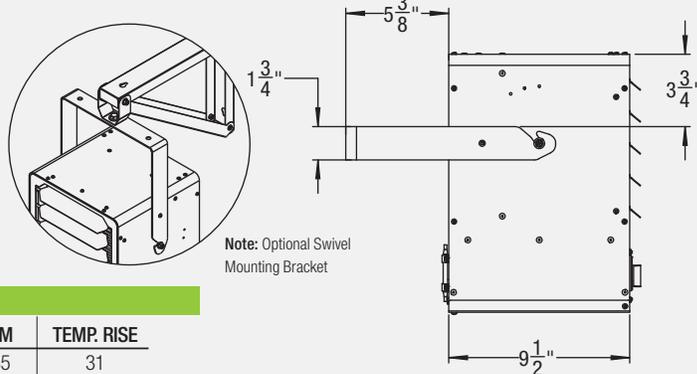
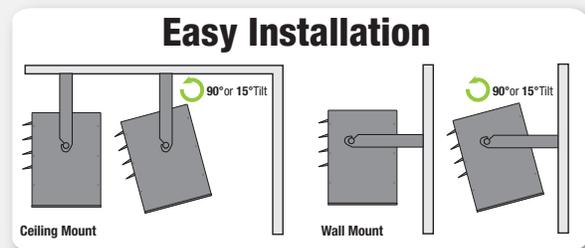
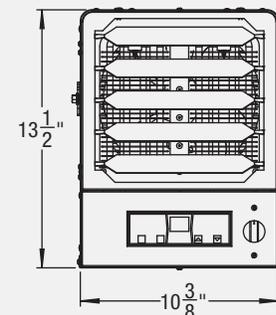
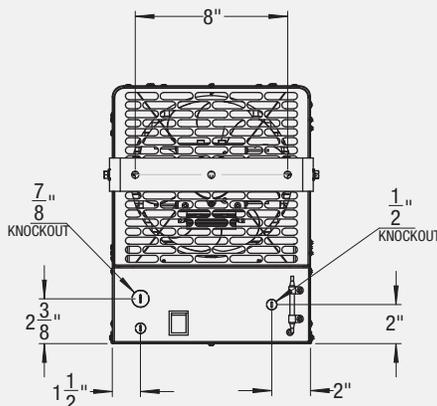
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Dimensional Data

Minimum clearance from combustibles: 18" from front, 2" from top, 6" from sides and 5" from rear. Minimum clearance 6' from floor. (Optional Disconnect Switch Shown)



Optional Disconnect Switch



TEMPERATURE RISE PER WATTAGE CHART

WATTS	BTUH	CFM	TEMP. RISE	WATTS	BTUH	CFM	TEMP. RISE
950	3,242	385	8	3800	12,969	385	31
1000	3,413	385	8	4000	13,652	385	33
1900	6,485	385	16	4160	14,198	385	34
2000	6,826	385	16	4750	16,212	385	39
2850	9,727	385	23	5700	19,454	385	47
3000	10,239	385	25	6000	20,478	385	49

Engineering Specifications

Contractor shall supply and install KBP ECO2S PRO Series unit heaters manufactured by King Electrical Mfg. Company. Heaters shall be of the wattage and voltage as indicated on the plans.

Construction: All exterior and interior enclosure components are fabricated from 20-gauge electrogalvanized steel with a rust-inhibiting baked enamel finish. Components are assembled using solid mechanical rivets rather than spot welding, eliminating heat-affected zones and hidden weld defects. Riveted joints are fully visible and inspectable, providing consistent structural integrity under vibration and thermal cycling. Smooth rounded corners provide a clean, modern appearance.

ECO2S Electronic Thermostat Control: Thermostat Temperature Range: 40° to 95°. Up, Down temperature mode. Automatic 2-Stage heating (High & ECO Modes). Start/Stop. Fan Only and Timer (1-9hours) Modes. Standard on all heaters.

Auto Memory Feature: Returns Unit To Last Settings After Power Outage.

Adjustable Outlet Louver: Louvers direct air up or down as needed for the heating application.

ECO2S PRO Remote 7-Day Thermostat: RF 2.4G RF Wireless Protocol. 7-day programmable touch sensitive thermostats with an integrated temperature sensor. Enables custom 7-day programmable heating schedules, functions as both a remote temperature sensor and a handheld remote control for heater operation.

Rear Intake Screen: Heavy gauge steel screen protects against foreign objects making accidental contact with the rotating fan blade.

Pic-A-Watt Heating Elements: Exclusive King multi-tap element allows field adjustment to several wattages at time of installation.

Steel sheath elements of various resistance are copper brazed to steel plate fins producing a multi-wattage heating element.

Unit Bearing Motor: Permanently lubricated, long life, unit bearing 4-Pole motor with 20 cc of oil. Enclosed rotor provides long-lasting, trouble-free operation. Thermally protected. 1500 RPM.

Aluminum Fan Blade: 5 blade fan mounted directly to the motor shaft for maximum efficiency.

CFM: 385

Universal Mounting Bracket: Combination ceiling/wall bracket is included with every heater.

Patented Smart Limit Protection (U.S. Patent #6,748,163 B2):

Equipped with King's patented thermal overload Smart Limit Protection®, which disconnects elements and motor in the event normal operating temperatures are exceeded. If thermal overload trips due to abnormal operating temperatures, thermal overload shall remain open until manually reset by turning the heater off for 15 minutes. Automatically reset of thermal overloads, which allow the element to continue to cycle under abnormal conditions, will not be accepted.

Fan Delay: The fan continues to operate after the thermostat shuts off in order to remove the residual heat left in the elements. Power must not be interrupted.

Standard Color: Onyx Gray

Easy Installation: A hinged quick access panel located on the bottom of the heater allows for quick wiring and easy maintenance for the life of the heater. Includes universal wall/ceiling bracket for simple installation.

Approvals: cULus (E41422) Seattle Energy Code Compliant