

Smart Heating Solutions

We Believe Experience Matters



Years



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.

Milkhouse Heater PHM-1



Specification	S	Minir
BTU	5120	front
Watts	1300/1500W	top
Power	120V~60Hz	sides.
Amps	12.5 A	rear
Heat Settings	2	
Cord Length	6 ft.	

mum Clearance

front3 f	t.
top1 f	t.
sides1 f	t.
rear1 f	t.



- 4 position switch, fan only/low/high/off
- Ni-chrome heating element
- 6 foot cord 120V grounded plug
- 2 heat settings 1300/1500 watts
- Safety tip-over switch
- Adjustable thermostat Convenient carrying handle

Power indicator light

- Overheat protection
- Durable powder coated steel housing
- I-year limited warranty

The PHM-1 Portable Milkhouse Heater

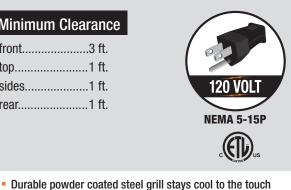
The PHM-1 portable utility heater is a durable heater designed for use in garage/shop applications, where supplemental heat is needed. The PHM-1 portable utility heater is a durable heater designed for use in garage/shop applications, where supplemental heat is needed. It features a rugged and durable metal housing. The easy-to-use thermostat lets you adjust heat to the perfect level for your space. For safety, an internal switch automatically cuts off power if heater accidentally tips, falls or overheats.

Ordering In	formation				Dimensions 15¾"h x 9¾"w x 7½"d
MODEL	UPC	VOLTS	WATTS	AMPS	Plug Type
PHM-1	20992	120	1300/1500	12.5	120V Plug

Portable Radiant Tower Heater PHTR-9



Specifications	Minimum Clearance
BTU 4100	front3 ft.
Watts600/120	W top1 ft.
Power120V~6	Hz sides1 ft.
Amps10 A	rear1 ft.
Heat Settings2	
Cord Length6 ft.	
U U	



- 2 heat settings 600/1200W
- Dual quartz radiant tower heater
- 6 foot cord 120V plug
- Safety tip-over switch
- Adjustable thermostat Comfort grip handle on back
- Overheat Protection

Power indicator light 1-year limited warranty

The PHTR-9 Portable Radiant Tower Heater

The PHTR-9 Dual quartz radiant tower heater has reflective heating technology that replicates the sun's healthy rays, directly warming the object or person in front of the heater. As the temperature of the heated surface rises, the warming effect is felt throughout the air and surrounding areas. Reflective heaters are great for open or large rooms, and actually save you energy by warming objects and not the entire room. Reflective heating is both safe and healthy-it produces no odors, chemicals or fumes and doesn't stir up dust. Remarkably efficient, our heater uses less power to create the same amount of heat as traditional heaters. Equipped with safety tip-over switch and overheat auto-off protection, the heater is safe and reliable.

Ordering I	nformation				Dimensions 22¼"h x 11"w x 7½"d
MODEL	UPC	VOLTS	WATTS	AMPS	Plug Type
PHTR-9	20999	120	600/1200	5-10	120V Plug

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Portable Utility Heater PUH Series



- Built-in thermostat (45°-85°F)
- Dual On/off rocker switches (750W ea.)
- 6 foot cord with 15A plug
- 120V (750W/1500W)

- Rugged metal case
- Comfort grip handle
- Ceramic heating elements
- Power indicator light

Model Code: PUH 12 15 1

A B C A: Series B: 12 - 120V C: Watts (1500) D: T - Thermostat



- Permanently lubricated motor ensures long life
- Durable scratch and rust resistant finish
- 1-year limited warranty

The PUH1215T Portable Utility Heater

The PUH1215T personal utility heater is designed to provide a back-up heating source at an affordable price. The convenient 6 foot cord allows greater mobility to areas needing heat. Easily set the desired temperature with the built-in thermostat. The auto-reset high-limit temperature control provides overheat protection. Standard color: grey body, black grill and handle. 1 year limited warranty.

Ordering Inf	ormation				Dimensions 7½"h x 6½"w x 5"d
MODEL	UPC	VOLTS	WATTS	AMPS	Plug Type
PUH1215T	20982	120	750/1500	12.5	120V Plug
			Comfort Grip Handle		
	Ceramic Heating Element	g	n	Rugged metal Case	
	Safety Grill			Rear Intake Fan	
	Built-In Thermo (on the back sid		Indicator Light	Dual 750W On/Off Switches	

Specifications		Minimum Clearance	
BTU	5100B	front3 ft.	\frown
Watts	750W / 1500W	top1 ft.	
Power (Volts)	120V~60Hz	sides1 ft.	
Amps	12.5 A	rear1 ft.	0
Cord Length	6 ft.		120 VOLT
Switch			
Air Flow	216 CFM Fan		NEMA 1-15P



Portable Shop Heater PSH1215T

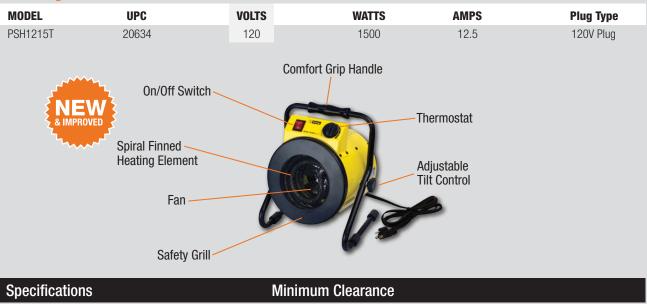


- Built-in thermostat
- On/off switch
- Adjustable tilt control
- Spiral finned heating element
- 6 Foot Cord with 15 Amp plug
- Comfort grip handle
 Auto-reset safety limit
- Power indicator light
- Permanently lubricated motor
- Durable scratch and rust resistant finish
- 1-year limited warranty

The PSH1215T Portable Shop Heater

The PSH1215T is a rugged portable heater designed to provide supplemental heat at an affordable price. Perfectly suited for personal use applications and small workshops/worksites. The convenient 6 foot cord allows greater mobility to areas needing heat. Easily set the desired temperature with the built-in thermostat. Sure stop high-limit temperature control provides overheat protection. Standard color: yellow body, black grill and handle. 1 year warranty.

Ordering Information



Specifications		Minimum Clearance	
BTU	5100B	front3 ft.	\frown
Watts	1500W	top1 ft.	
Power (Volts)	120V~60Hz	sides1 ft.	
Amps	12.5 A	rear1 ft.	
Cord Length	6 ft.		120 VOLT
Switch	ON / OFF		
Air Flow	216 CFM		NEMA 5-15P

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Portable Shop Heater PSH2440TB



- Standard color: Yellow with black accents
- Includes both comfort grip & storage handle
- High limit temperature control with manual reset
- 300 CFM fan
- Stainless steel tubular heating element
- Built-in thermostat (45-85°F)

- Standard finish epoxy/polyester paint
- Handle may be used as a reel for the electric cable
- Mounting bracket for wall or ceiling installation included
- Power indicating light
- 3 pronged 20A 250 VAC outlet required



- 6 ft. (2m) cord NEMA 6-20P
- 51° F temperature rise
- Auto fan delay
- 1-year limited warranty

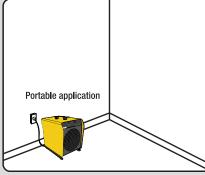
The PSH Portable Shop Heater

The PSH is a high power portable heater designed to provide a back-up heating source at an affordable price. Perfectly suited for the workshop, garage or construction sites. The convenient 6 foot cord allows greater mobility to areas needing heating, while the handle serves as a reel for the cord when not in use. Easily set the desired temperature with the built-in thermostat. Sure stop high-limit temperature control with manual reset provides overheat protection. With a 300 CFM fan, heat is dispersed efficiently. Standard color: Yellow. 240 Volt Single Phase. 1-year warranty.

Ordering Information

MODEL	UPC	VOLTS	WATTS	AMPS	Plug Type
PSH2440TB	20637	240/208*	4,000/3,000	16/14	NEMA #6-20P

*Dual rated heaters will draw 13% less amps and 25% less wattage when operated at 208V.

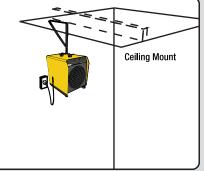


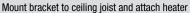
Place on the floor and plug into 20 Amp outlet

Specifications

DTU	12.000P
BTU	· · · · · · · · · · · · · · · · · · ·
Watts	3,750W
Heating Area (ft ²)	450 ft ²
Power (Volts)	240V~60Hz
Amps	16 A
Heat Settings 1	0n/0ff
Heat Settings 2	Thermostat

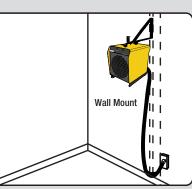
Easy Installation



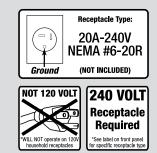


Minimum Clearance front......3 ft. top......1 ft.

top1	ft.
sides1	ft.
rear1	ft.



Mount bracket to wall stud and attach heater





Portable Garage Heater PGH Series



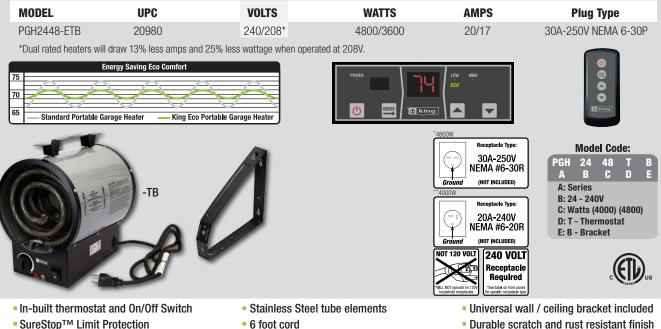
- Energy efficient 2-stage heating
- Fan only mode
- Timer mode (1-9 Hours)
- Remote control with wall-mount holder included
- Large LED display
- SureStop[™] Limit Protection
- Stainless steel tube elements

- Carrying handle with built-in cord storage
- Universal wall/ceiling bracket included
- Limited 1-year warranty

The ECO2S 2-Stage Portable Garage Heater with IR Remote Control

The ECO2S PGH Series portable garage heater offers unparalleled performance, energy efficiency and user control by incorporating another King innovation, the in-built ECO2S electronic thermostat with remote control. Offering energy efficient 2-stage heating, with ECO mode that automatically uses the lowest wattage needed to heat the room, integrated fan only and timer modes, as well as a remote control for simple operation. The included universal wall / ceiling bracket and convenient 6 foot cord, allows for greater mobility to areas needing heat. The SureStop[™] high-temperature limit, with auto-rest provides protection from overheating.

Ordering Information



- Auto-reset Fan Delay increases efficiency
- Carrying handle with built-in cord storage
- Durable scratch and rust resistant finish
- Limited 1-year warranty

The PGH Series Portable Garage Heater

The PGH Series is a rugged portable heater designed to provide a high capacity heating source at an affordable price. Perfectly suited for workshops, garages or construction sites. Easily set the desired temperature with the in-built mechanical thermostat. Offering a SureStop™ high temperature-limit, with auto-reset providing protection from overheating.

Ordering Information

MODEL	UPC	VOLTS	WATTS	AMPS	Plug Type
PGH2448TB*	20984	240/208	4800/3600	20/17	30A-250V NEMA 6-30P+
PGH2440TB*	20998	240/208	4000/3000	16/14	20A -240V NEMA 6-20P**
*Does not come wit	th electronic control or re	mote			

Radiant Heater RSH1215



1500W Infrared quartz heating tube

6 foot cord 120V grounded plug

For dry locations only

king

- Anti-freeze function
- Adjustable thermostat Overheat Protection
- Wall or ceiling mount bracket included
 - 1-year limited warranty

The RSH1215 Infrared Quartz Heater

The RSH1215 1500W Infrared quartz heater has the ability to transfer heat to a person or object without heating the surrounding air. The RSH1215 is commonly used for indoor or outdoor covered spaces spot heating. Perfect for garages, covered patios, or workshops. The universal wall and ceiling mounting bracket is easy to install and angle is adjustable to suit your needs.

					Dimensions
Ordering Inform	nation				7½"h x 34½"w x 3¾"d
MODEL	UPC	VOLTS	WATTS	AMPS	Plug Type
RSH1215	20983	120	1500	12.5	120V Plug
Accessories					
MODEL	UPC	1	DESCRIPTION		WEIGHT
RLAMP1215	20981	F	REPLACEMENT LAMPS		1
Specifications			Easy	Installation	
Watts	1500W		Ceiling		Ceiling
	120V~60Hz		18 1/2"	*Chain Mount not inclu	E T
Amps			V V	Vall	1 8 1/2" Wall
Cord Length				6	Θ .
Heat Settings			Min		
Approvals	/// \	Wall Mo		Ceiling Mo	16 1/2"
	LISTED	wall int	unt	Octiming Mo	June
Mount between 6 ft.	to 8 ft.			8	
			A	8 9 8	
			18½"	0 0 0	
				•	Wall
			★	- - -	
			H	e	
					n 16½"
		Lanation 1			
Heats an area of 6 ft	by 6 ft		a in ceiling or wall and secur position and tighten down. N		ach heater to bracket, adjust
Heats an area of 6 ft	. שאַ ס ונ	10 0031100	solution and tighton down. It		

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Selecting The Proper Unit Heater

To obtain the best performance from King unit heaters use this chart for proper heater selection. To determine which type of unit is best note the ceiling height and room size. In addition to the air throw capabilities of each type of unit heater, wall and ceiling insulation must be considered when determining wattage requirements. The most common error of unit heater selection is installing a unit designed for low ceiling application on a high ceiling. In this application heat is unable to circulate properly to the floor – the result: unsatisfactory comfort or performance level. Following this guide allows correct unit heater selection for the determined space and environment. With correct selection and placement this King unit heater will provide years of high performance heating.

Application Tips

First, calculate heating loads in the conventional way using the N.E.M.A. handbook or ASHRAE guide. Next, determine quantity and size of heaters to be used. In instances where large groups of people are normally settled in the same location use a large number of smaller kW heaters (Example: people on a production line or skilled machine operations). By utilizing heaters in this manner one can best distribute uniform heat, prevent hot drafts, reduce potential noise levels and balance the electrical operating demand. When considering warehouse areas or storage rooms where heat distribution and constant temperatures are less important, use fewer heaters of higher capacity. To maintain uniform heat and reduce stratified air it is recommended that the total CFM of the units turn the air over approximately

3 times per hour.

Horizontal Mount

Smaller rooms can be heated by one unit heater. Where two walls are exposed heaters should be mounted as shown below. In larger rooms, units should be located so air streams wipe exposed walls without blowing at them. Units should be located so the airstream of one supports that of another thus setting up a circulatory air movement. (Distance between units to be approximately 1 times published air throw). Units should not be mounted horizontally in areas having ceiling heights in excess of 10 to 12 feet. *See Figure 1*

Vertical Mount

Units should be mounted vertically in high bay areas where they may not otherwise interfere with assorted material or handling equipment. Heaters should be situated to provide free air circulation. Size and selection of units should be based on recommended mounting height. Unit heaters are frequently used to combat cold air inrush when loading dock doors are opened. For such applications, one or more units should be arranged to blow warm air vertically in front of opening. *See Figure 2*

Dual Mounting

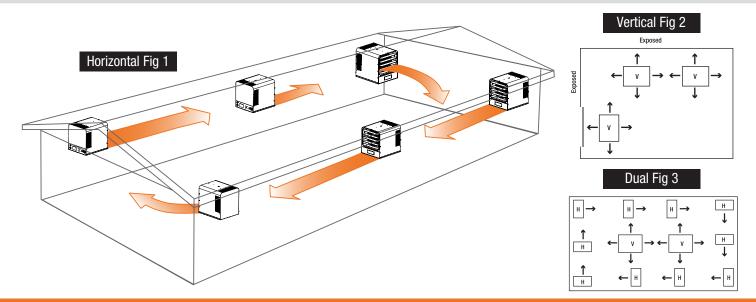
Where square footage is large and comfort essential, both horizontal and vertical installations may best serve your requirements. See Figure 3

Mounting Limitations

Unit heaters should not be used in potentially explosive atmospheres. The finish is not intended for direct salt spray exposure in marine applications or the highly corrosive atmospheres of swimming pools, chemical storage bins, etc. Please refer to the factory for explosion proof or marine application heater information. Do not install unit heaters above recommended maximum mounting height. See chart for height information. Obstructions must not block unit heater air inlet or discharge. To prevent possible injury heaters must be mounted at least 6 feet above the floor to prevent accidental contact with heating element or fan blade.

Selection

CEILING HEIGHT	UNDER 8 FEET	10 FEET	12 FEET	13 FEET AND OVER
250 Sq. Ft.	N/A	KBP	KBP	KFUH
1000 Sq. Ft.	KBP	KBP	KBP / KB	KFUH
2000 Sq.Ft.	KBP / KB	KBP / KB	KB / KFUH	KFUH
3000 Sq. Ft.	KB	KB	KFUH	KFUH
5000 Sq. Ft.	KB	KFUH	KFUH	KFUH
10,000 Sq. Ft.	KB	KFUH	KFUH	KFUH





Garage/Shop Heater EKB Series



IV	lodel	Code	
EKB	24	40	TB
A	В	C	D
A: Ser	ies		
B: 12 -	120V,	20 - 2	08V
24 -	· 240V		
C: Wat	ts (50	00)	
		nostat	
& B	racket	t	





- Quick heat element
- Long life unit bearing motor
- Patented Smart Limit[®] protection
- Aluminum fan blade
- Built-in thermostat

Universal mounting bracket

Safety sensor on each element

Standard color: black textured finish

1-year limited warranty



The EKB Garage/Shop Heater

The EKB is designed to be an affordable, high-capacity garage / shop heater. Combining King's patented Smart Limit safety technology with dual NiChrome coil elements for rapid heat transfer, the EKB is ideal for many residential applications. The flow-through design efficiently moves air by pulling air from the back and sides of the heater and discharges it out the front, easily heating a large space. The built-in thermostat has a temperature range from 40 to 85 degrees. The universal mounting bracket can be wall or ceiling mounted at a minimum of 6 feet above the floor. Good air distribution and comfort is achieved by swiveling the bracket to specific work areas.

Ordering Information

	MODEL	UPC	VOLTS	WATTS	AMPS	WIRE	BREAKER SIZE	TEMP RISE	HEATING SQ FT
120V	EKB1230TB	16506	120	2850	24	10-2 w/ground	30 Amp 1 pole	40	500
1200	EKB1220TB	16507	120	1920	16	12-2 w/ground	20 Amp 1 pole	40	300
	EKB2050TB	16501	208	5000	24	10-2 w/ground	30 Amp 2 pole	80	750
208V	EKB2040TB	16503	208	3750	18	10-2 w/ground	30 Amp 2 pole	70	600
	EKB2030TB	16505	208	2850	14	12-2 w/ground	20 Amp 2 pole	50	500
	EKB2450TB	16500	240	5000	20	10-2 w/ground	30 Amp 2 pole	80	750
240V	EKB2440TB	16502	240	3850	16	12-2 w/ground	20 Amp 2 pole	70	600
	EKB2430TB	16504	240	2850	12	14-2 w/ground	15 Amp 2 pole	50	500

Engineering Specifications

Heating Elements: Rigid Muscovite Mica construction with 80-20 NiChrome heating wire provides quick heating without cold air start ups, heat is wiped from elements as fans slows to a stop. Manual reset Safety sensor on each element.

Thermostat: Factory installed single pole operation range 40 to 85 degrees F.

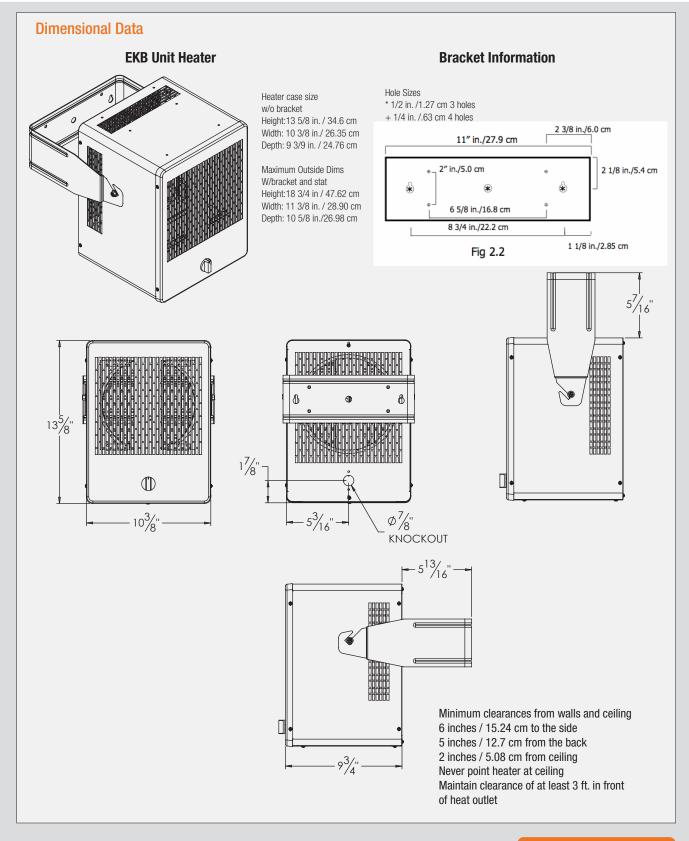
Unit Bearing Motor: Permanently lubricated, cast aluminum unit bearing, 6-watt output 4 pole motor, 1550 rpm, 20 cc oil supply.

Mounting Bracket: 18 ga steel, multiple mounting options - ceiling/wall. **CFM:** 270 Maximum **Thermal Overload:** Heaters shall be 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. U.S. PATENT #6,748,163 B2 • CIPO PATENT #2,393,882 **Case:** 22 ga steel, inlet and outlet perforation, special side and top safety air inlets.

Exterior: Durable textured finish. **Approval:** cULus (E41422)

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Garage/Shop Heater EKB Series



MINIMUM CLEARANCE

From combustibles: 18" from front, 2" from top, 6" from sides and 5" from rear.

Compact Unit Heater KBP Series Pic-A-Watt



- Pic-A-Watt[®] element
- Multiple wattage selection
- Long life cast iron motor
- Aluminum fan blade
- High accuracy built-in thermostat
- Powder-coated, textured finish
- Fan delay
- Patented Smart Limit Protection[®]
- Universal (wall/ceiling) mounting bracket
- Selector switch—fan/heat/off
- 5-year limited warranty
- Standard color: almond



Multiple Wattage Unit Heater

The KBP is the industry standard for multi-wattage garage / shop heaters. Designed for rugged performance, the flow-through design efficiently moves air by pulling air from the back of the heater and discharges it out the front, easily heating a large space. With high quality components suitable for both residential and commercial applications, it comes standard with a 3-position switch and an accurate built-in thermostat. The integral fan delay continues to dissipate heat from the elements during the cool down period, maximizing the heat exchange in the room. King's exclusive dual Pic-A-Watt steel fin elements allow customers to select from a range of wattage options, tailoring the heater to an area's specific heating requirements.

Ordering Information

MODEL	UPC	VOLTS	PHASE	WATTAGE	AMPS	WEIGHT (lbs.)
KBP1230	15191	120	1	2850•1900•950	24	26
KBP2406*	15190	240/208*	1	5700•4750•3800•2850•1900•950	24/27	24
KBP2006-3MP**	15193	240/208*	1-3	5700•2850	24/27	26
KBP2406-3MP**	15188	240/208*	1-3	5700•2850	24/27	25
KBP2704	15187	277	1	4000•3000•2000•1000	15	26
KBP4804-3MP**	15196	480***	1-3	4160	9/5	26
KBP4806-3MP**	15197	480***	1-3	6000	13/8	26

*Approved for 208V operation. Heater will draw 13% less Amps and 25% less wattage **3-Phase units do not have Heat / Fan / Off ***480 Volt models are 24 Volt control Minimum clearance from combustibles: 18" from front, 2" from top, 6" from sides and 5" from rear. Minimum clearance 6' from floor.

Engineering Specifications

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

Pic-A-Watt Heating Element: 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.

Built-in Thermostat: Single pole factory installed hydraulic capillary tube thermostat for precision heating control. Operating range 40° to 90° F. **Fan/Heat/Off Switch:** 3-position switch provides heating and summer fan

only operation.

Fan Delay Switch: 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.

CFM: 270

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

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. 1300 RPM. Electrically Held Smart Limit Protection: Heater shuts off when an

over temperature condition exists and automatically resets when the normal operating temperature returns. **Tested:** UL 2021

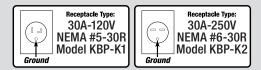
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Approval: cCSAus
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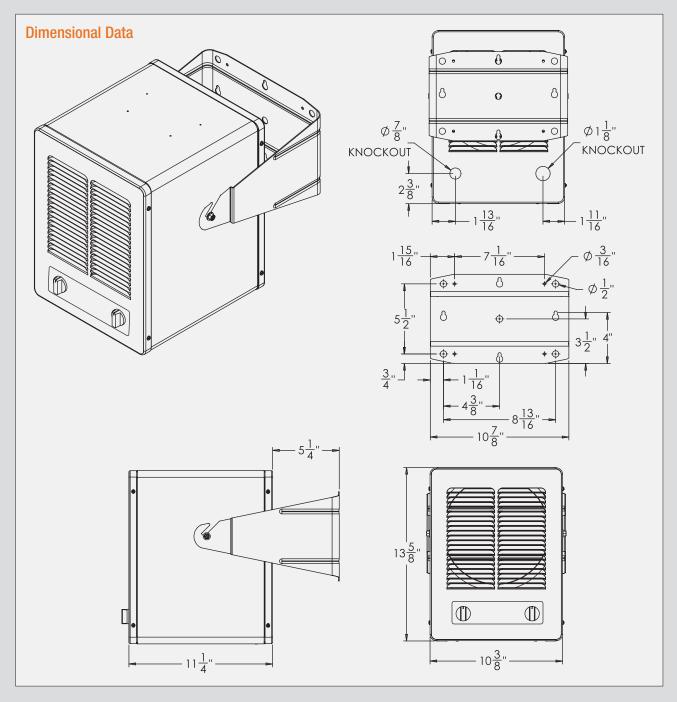
Pic-A-Watt Compact Unit Heater KBP Series

Accessories

MODEL	UPC	PHASE WEIGHT	(lbs.)
KBP-K1	15198	6 ft. cord/handle kit - 120V, 1-Phase, 30 Amp (Receptacle not included. See below)	2
KBP-K2	15199	6 ft. cord/handle kit - 240V, 1-Phase, 30 Amp (Receptacle included. See below)	2
KBP-RT	N/A	Provision for remote thermostat (line voltage)	N/A
*KBP-RTLV1	N/A	Provision for remote thermostat - 1-Phase (24V)	N/A
*KBP-RTLV3	N/A	Provision for remote thermostat - 3-Phase (24V)	N/A

*Factory installed only - Heat/Fan/Off activated at unit only - can not operate remotely





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Compact Heavy Duty Garage Heater GH Series



- Spiral finned element
- Permanetly lubricated motor
- Patented Smart Limit® protection
- High efficiency aluminum fan blade
- Built-in thermostat
- Standard color: Gray
- 3-year limited warranty
- Adjustable louvers
- Universal mounting bracket Power & Over-temp indicating lights
 - High /Low switch & fan delay*
 - Prewired for remote thermostat option



Full color consumer packaging

Model Code: 05 24

> R C

A: Series B: 24 - 240V C: Watts D: TB- Thermostat & Bracket

ΤB

The GH Compact Heavy Duty Unit Heater

The GH compact heavy duty unit heater is designed for use as primary or supplemental heat sources in large or exposed areas, including commercial stores, workshops, barns, storage shed and garages to prevent freezing. Spiral finned steel elements and high air volume (CFM) ensure efficient heat exchange producing cooler element operation, prolonging heater life. By combining the highest guality components with a dynamically balanced fan blade, the GH unit heater will provide years of trouble-free service. Includes both a power on indicating light and a red caution light that comes on if the heater stops due to the over temperature limit tripping. A universal wall/ceiling bracket provides for quick and simple installation. The built-in thermostat turns the heater on and off to maintain the desired room temperature or a remote wall thermostat can be used. The heater is prewired to easily convert from the built-in thermostat to a wall mounted line voltage thermostat. The heater can also be controlled by purchasing a transformer relay to operate a remote 24V wall thermostat. Refer to the installation instructions regarding the amperage requirements for use of both the line voltage thermostats and transformer relays.

MODEL UPC KW **BTUH PHASE** VOLTS AMPS MOTOR CFM TEMP. AIR MAX. WT. HP RISE THROW MOUNT (lbs.) *GH2405TB 22278 17 240 20.8/18 9W 400 40° 16ft. 8ft. 30.5 5 1 GH2407TB 22279 7.5 25.6 240 31.2/27 16W 600 40° 20ft. 9ft. 45.0 1 GH2410TB 22280 10 34.1 1 240 41.6/36.1 25W 725 44° 24ft. 10ft. 45.0

Ordering Information - single phase

* High Low switch & fan delay not available in 5kW unit

Engineering Specifications

Contractor shall supply and install GH 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 metal enclosure parts are made from 20 gauge electrogalvanized Steel with a rust inhibiting baked enamel finish. Rounded corners give it an attractive modern appearance.

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

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

Spiral Fin Elements: The metal sheath element is copper brazed with spiral fins then molded into a coil configuration. This combination produces the best heat transfer while eliminating the potential for hot spots by positioning the element in the maximum airflow stream.

Aluminum Fan Blade: Axial flow-type fan mounted directly to the motor shaft for maximum efficiency.

Built-in Thermostat: Single pole factory installed hydraulic capillary tube thermostat for precision heating control. Operating range 40° to 90° F. Red Over-temp Caution in Light: Only comes on if the high temperature safety limit has tripped.

Yellow Power on Light: Gives visual indication that the heater is turned on. * High/Low Switch: Provided on 7.5kw & 10kw models. Low setting reduces wattage in half. Fan delay keeps fan running after thermostat cycles off to dissipate all the heat from the elements, making the heater more efficient and prolonging the life of the elements.

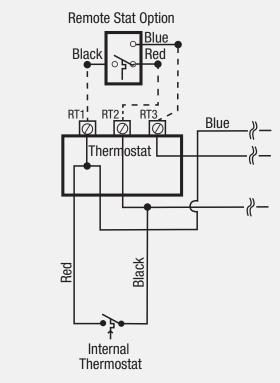
Engineering Specifications Continued

Two Pole Contactor: Provided on 7.5kw & 10kw models. Breaks both L1 and L2 of the power supply wires, the control circuit operates at 240V. **Pre-Wired For Optional Room Thermostat:** Heater shall include a 2-pole terminal block and is prewired to easily convert from the built-in thermostat to a wall mounted line voltage thermostat. The heater can also be controlled by purchasing a transformer relay to operate a remote 24V wall thermostat. Refer to the installation instructions regarding the amperage requirements for use of both the line voltage thermostats and transformer relays. For 240V heaters use transformer relay model 24A01G-3 or RC840T-240/U.

Electrically Held Thermal Overload: Heaters shall be equipped with King's patented Smart Limit Protection®, which disconnects the heater when an over temperatures condition occurs. If the Smart Limit trips, it will remain open and will not automatically reset until the thermostat or circuit breaker is turned off for a few minutes. After the overload switch cools the power can be turned back on and the heater will operate again. This keeps the heater from repeatedly cycling allowing the user to

Pre-Wired For Optional Line Voltage Room Thermostat*:

Connect a standard 240V single pole (SP) thermostat as a switch leg or a 3-wire SP electronic thermostat by providing both power legs, (L1 and L2) to drive the electronics.



Note: Do not use a double pole thermostat. The incoming power supply is connected to the heater and is then switched through a contactor, so the thermostat will draw less than 1 amp through the control circuit.

*Above diagram reflects wiring for 7.5kW & 10kW heaters only. For 24V or line voltage remote thermostat wiring of 5kW units, refer to installation manual for details

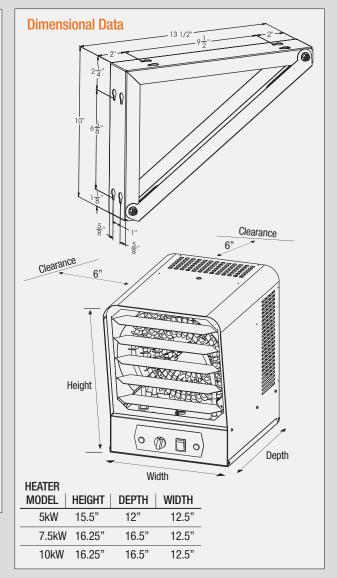
determine the cause of the over temperature condition such as an object being placed in front of heater.

Totally Enclosed Fan Motor: Permanently lubricated long life, unit bearing with 20cc of oil.Epoxy-coated motor with enclosed rotor resists moisture and corrosion for long-lasting, trouble-free operation.

Easy Installation: A 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)

• GH Wall/Ceiling Bracket Included

Unit heater brackets can be used for mounting on ceiling or wall. 3/8" threaded hole on top of unit heater can also be used with threaded rod to drop the unit closer to the floor.



Field Mount Accessories

MODEL	DESCRIPTION	WT. (lbs.)
24A01G-3	Electric Heat Relay For 240V	0.5
RC840T-240/U	Electric Heat Relay With a 24V-208/240V Transformer	0.5

🗄 king **Compact Heavy Duty Unit Heater SKB Series**



- Spiral finned element
- Permanetly lubricated motor
- Patented Smart Limit® protection
- High efficiency aluminum fan blade 3-year limited warranty
- Built-in thermostat
- Standard color: Gray
- Adjustable louvers
- Universal mounting bracket Power & Over-temp indicating lights
 - High /Low switch & fan delay*
 - Prewired for remote thermostat option



Kraft box packaging

UnitHeater

Model Code:

B ß

SKB 24 05

A: Series B: 20 - 208V 24 - 240V C: Watts **D: Single Phase** E: Thermostat F: Bracket

The SKB Compact Heavy Duty Unit Heater

The SKB compact heavy duty unit heater is designed for use as primary or supplemental heat sources in large or exposed areas, including commercial stores, workshops, barns, storage shed and garages to prevent freezing. Spiral finned steel elements and high air volume (CFM) ensure efficient heat exchange producing cooler element operation, prolonging heater life. By combining the highest quality components with a dynamically balanced fan blade, the SKB unit heater will provide years of trouble-free service. Includes both a power on indicating light and a red caution light that comes on if the heater stops due to the over temperature limit tripping. A universal wall/ceiling bracket provides for quick and simple installation. The built-in thermostat turns the heater on and off to maintain the desired room temperature or a remote wall thermostat can be used. The heater is prewired to easily convert from the built-in thermostat to a wall mounted line voltage thermostat. The heater can also be controlled by purchasing a transformer relay to operate a remote 24V wall thermostat. Refer to the installation instructions regarding the amperage requirements for use of both the line voltage thermostats and transformer relays.

MODEL UPC KW **BTUH PHASE** VOLTS AMPS MOTOR CFM MAX. WT. TEMP. AIR **RISE THROW** MOUNT HP (lbs.) *SKB2005-1-T-B 13413 5 17 1 208 24 9W 400 40° 16ft. 8ft. 30.5 SKB2007-1-T-B 13414 7.5 25.6 1 208 36.1 16W 600 40° 20ft. 9ft. 45.0 SKB2009-1-T-B 13415 9.2 25W 42° 45.0 31.4 1 208 44.2 725 24ft. 10ft. SKB2405-1-T-B 13410 5 17 1 240/208* 20.8/18 9W 400 40° 8ft. 30.5 16ft. SKB2407-1-T-B 7.5 40° 13411 25.6 1 240/208* 31.2/27 16W 600 20ft. 9ft. 45.0 SKB2410-1-T-B 13412 10 34.1 1 240/208* 41.6/36.1 25W 725 44° 24ft. 10ft. 45.0

Ordering Information - single phase

*Dual rated heaters will draw 13% less amps and 25% less wattage when operated at 208V. *High Low switch & fan delay not available in 5kW unit

Engineering Specifications

Contractor shall supply and install SKB Series unit heaters manufactured by King Electrical Mfg. Company.

Construction: All exterior and interior metal enclosure parts are made from 20 gauge electrogalvanized Steel with a rust inhibiting baked enamel finish. Rounded corners give it an attractive modern appearance.

Adjustable Outlet Louver: Louvers direct air up or down as needed. **Rear Intake Screen:** Heavy gauge steel screen protects against foreign objects making accidental contact with the rotating fan blade.

Spiral Fin Elements: The metal sheath element is copper brazed with spiral fins then molded into a coil configuration. This combination produces the best heat transfer while eliminating the potential for hot spots by positioning the element in the maximum airflow stream.

Aluminum Fan Blade: Axial flow-type fan mounted directly to the motor shaft for maximum efficiency.

Built-in Thermostat: Single pole factory installed hydraulic capillary tube thermostat for precision heating control. Operating range 40° to 90° F. **Red Caution Light:** Comes on if high temperature safety limit trips. Yellow Power on Light: Gives visual indication that the heater is turned on. * High/Low Switch: Provided on 7.5kw & 10kw models. Low setting

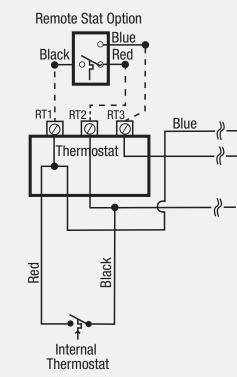
reduces wattage in half. Fan delay keeps fan running after thermostat cycles off to dissipate all the heat from the elements, making the heater more efficient and prolonging the life of the elements.

Engineering Specifications Continued

Two Pole Contactor: Provided on 7.5kw & 10kw models. Breaks both L1 and L2 of the power supply wires, the control circuit operates at 240V. **Pre-Wired For Optional Room Thermostat:** Heater shall include a 2-pole terminal block and is prewired to easily convert from the built-in thermostat to a wall mounted line voltage thermostat. The heater can also be controlled by purchasing a transformer relay to operate a remote 24V wall thermostat. Refer to the installation instructions regarding the amperage requirements for use of both the line voltage thermostats and transformer relays. For 240V heaters use transformer relay model 24A01G-3 or RC840T-240/U. For 208V heaters use model 24A05E-1 or RC840T-240/U can be used on 7.5kW/10kW heaters.

Electrically Held Thermal Overload: Heaters shall be equipped with King's patented Smart Limit Protection®, which disconnects the heater when an over temperatures condition occurs. If the Smart Limit trips, it will remain open and will not automatically reset until the thermostat or circuit breaker is turned off for a few minutes. After the overload switch cools the power can be turned back on and the heater will operate again. This keeps the heater from repeatedly cycling allowing the user to

Pre-Wired For Optional Line Voltage Room Thermostat*: Connect a standard 240V single pole (SP) thermostat as a switch leg or a 3-wire SP electronic thermostat by providing both power legs, (L1 and L2) to drive the electronics.



Note: Do not use a double pole thermostat. The incoming power supply is connected to the heater and is then switched through a contactor, so the thermostat will draw less than 1 amp through the control circuit.

*Above diagram reflects wiring for 7.5kW & 10kW heaters only. For 24V or line voltage remote thermostat wiring of 5kW units, refer to installation manual for details

Field Mount Accessories

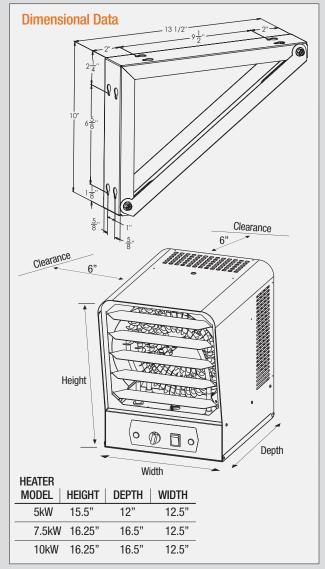
determine the cause of the over temperature condition such as an object being placed in front of heater.

Totally Enclosed Fan Motor: Permanently lubricated long life, unit bearing with 20cc of oil. Epoxy-coated motor with enclosed rotor resists moisture and corrosion for long-lasting, trouble-free operation.

Easy Installation: A 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)

• SKB Wall/Ceiling Bracket Included

Unit heater brackets can be used for mounting on ceiling or wall. 3/8" threaded hole on top of unit heater can also be used with threaded rod to drop the unit closer to the floor.



MODEL	DESCRIPTION	WT. (lbs.)
24A01G-3	Electric Heat Relay For 240V	0.5
24A05E-1	Electric Heat Relay For 208V	0.5
RC840T-240/U	Electric Heat Relay With a 24V-208/240V Transformer	0.5



Heavy Duty Unit Heater KB Series



The KB Horizontal Unit Heater

King's KB series unit heaters are designed for use as primary or supplemental heat sources in large or exposed areas, including high-rise buildings, stores, warehouses, garages, water treatment and fire room vaults to prevent freezing. Spiral finned steel elements and high CFM ensure even air distribution producing cooler element operation, prolonging heater life. By combining the highest quality components, with a dynamically balanced fan blade, the KB unit heater will provide years of trouble-free service. Includes universal wall/ceiling bracket for simple installation.

Factory Installed Options

Power Contactor: Standard on heaters above 5kW and on all 3-Phase models; optional on 3 to 5kW 1-Phase heaters.

24 Volt Control: Standard on 480V heaters; optional on all other heaters. **Mounting:** Standard universal bracket made from heavy gauge Steel.

Control Options

- 1-Pole or 2-Pole field installed thermostat temperature indicated label with 44°F energy code setting
- Padlocking disconnect
- Wall-mounted thermostat line or low voltage

NOTE: Multiple heaters can be controlled by a single thermostat if phasing is coordinated in the control wiring.

Engineering Specifications

Contractor shall supply and install KB 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 metal enclosure parts are made from 20 gauge electrogalvanized Steel with a rust inhibiting baked enamel finish. Smooth rounded corners and protective edge trim give an attractive modern appearance.

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

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

Spiral Fin Elements: The metal sheath element is copper brazed with spiral fins then molded into a coil configuration. This combination produces the best heat transfer while eliminating the potential for hot spots by positioning the element in the maximum airflow stream.

Totally Enclosed Fan Motor: Permanently lubricated long life, unit bearing with 20cc of oil. Epoxy-coated motor with enclosed rotor resists moisture and corrosion for long-lasting, trouble-free operation.

Staging: Two-Stage operation is available as an optional feature.

Aluminum Fan Blade: Axial flow-type fan mounted directly to the motor shaft for maximum efficiency.

Manual Thermal Cutout: Heaters shall be 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. .

Internal Controls: Magnetic contactors are standard on all 480V heaters, all 208V/1-Phase, 240V/1-Phase, 277V/1-Phase heaters above 6kW, and all 3-Phase heaters. The control voltage is equal to the line voltage (208, 240 or 277) except for 480V models where a transformer is provided for 24V control. Over 5kW the line voltage control is operating the contactor coil only and will draw only 1 Amp. See page 64 for control voltages. **Fusing:** Internal circuit fusing is provided when the heater ampacity exceeds 48 Amps to comply with N.E.C. standards. A fan delay is provided standard on models 12.5-kW and above to dissipate residual heat from the

Easy Installation: A hinged 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)

heating elements.

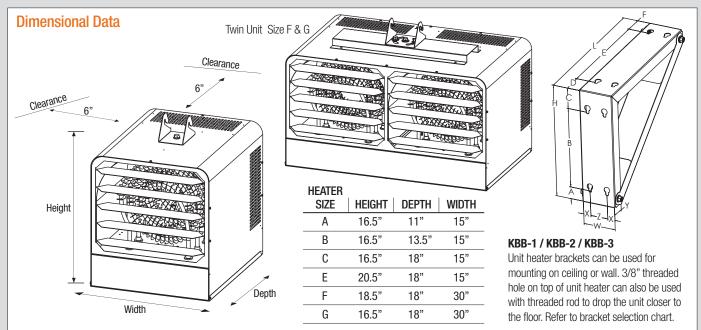
🇄 king 🏾

Heavy Duty Unit Heater KB Series

Ordering I	nforma	ation	- single	e phase	•									
MODEL	UPC	KW	BTUH	PHASE	VOLTS	AMPS	**THERMOSTAT Control Voltage	MOTOR HP	CFM	TEMP. RISE	AIR Throw	MAX. MOUNT HEIGHT	SIZE	WT. (Ibs.)
KB2003-1	20928	3.3	11.1	1	208	15.8	208	9W	400	36°	15ft.	8ft.	Α	30.5
KB2403-1	20928	3.3	11.1	1	240/208*	13.7	240	9W	400	36°	15ft.	8ft.	Α	30.5
KB2703-1	20928	3.3	11.1	1	277	11.9	277	9W	400	36°	15ft.	8ft.	Α	30.5
KB2004-1-B1	20928	4	13.5	1	208	19.2	208	9W	400	38°	15ft.	8ft.	А	30.5
KB2404-1-B1	13354	4	13.5	1	240/208*	16.6/14.4	240	9W	400	38°	15ft.	8ft.	А	30.5
KB2704-1-B1	13361	4	13.5	1	277	14.4	277	9W	400	38°	15ft.	8ft.	А	30.5
KB4804-1-B1	22091	4	13.5	1	480	8.3	24	9W	400	38°	15ft.	8ft.	Α	30.5
KB2005-1-B1	13366	5	17	1	208	24	208	9W	400	40°	16ft.	8ft.	Α	30.5
KB2405-1-B1	13374	5	17	1	240/208*	20.8/18	240	9W	400	40°	16ft.	8ft.	Α	30.5
KB2705-1-B1	15240	5	17	1	277	18.1	277	9W	400	40°	16ft.	8ft.	Α	30.5
KB4805-1-B1	13388	5	17	1	480	10.4	24	9W	400	40°	16ft.	8ft.	Α	30.5
KB2007-1-B2	22242	7.5	25.6	1	208	36.1	208	16W	600	40°	20ft.	9ft.	В	45.0
KB2407-1-B2	22243	7.5	25.6	1	240/208*	31.2/27	240	16W	600	40°	20ft.	9ft.	В	45.0
KB2707-1-B2	22095	7.5	25.6	1	277	27	277	16W	600	40°	20ft.	9ft.	В	45.0
KB4807-1-B2	22244	7.5	25.6	1	480	15.6	24	16W	600	40°	20ft.	9ft.	В	45.0
KB2010-1-B2	13538	10	34.1	1	208	48.1	208	25W	725	44°	24ft.	10ft.	В	45.0
KB2410-1-B2	13546	10	34.1	1	240/208*	41.6/36.1	240	25W	725	44°	24ft.	10ft.	В	45.0
KB2710-1-B2	13554	10	34.1	1	277	36.1	277	25W	725	44°	24ft.	10ft.	В	45.0
KB4810-1-B2	13560	10	34.1	1	480	20.8	24	25W	725	44°	24ft.	10ft.	В	45.0
KB2012-1-B2	13616	12.5	42.7	1	208	60.1	208	35W	825	48°	30ft.	11ft.	С	46.5
KB2412-1-B2	13624	12.5	42.7	1	240/208*	52/45.1	240	35W	825	48°	30ft.	11ft.	С	46.5
KB2712-1-B2	22096	12.5	42.7	1	277	45.1	277	35W	825	48°	30ft.	11ft.	С	46.5
KB4812-1-B2	22097	12.5	42.7	1	480	26	24	35W	825	48°	30ft.	11ft.	С	46.5
KB2015-1-B2	13672	15	51.2	1	208	72.1	208	50W	925	51°	33ft.	12ft.	С	46.5
KB2415-1-B2	22098	15	51.2	1	240/208*	62.5/54.1	240	50W	925	51°	33ft.	12ft.	С	46.5
KB2715-1-B2	22099	15	51.2	1	277	54.2	277	50W	925	51°	33ft.	12ft.	С	46.5
KB4815-1-B2	22100	15	51.2	1	480	31.3	24	50W	925	51°	33ft.	12ft.	C	46.5

*Dual rated heaters will draw 13% less amps and 25% less wattage when operated at 208V. Maximum mounting height is manufacturer's recommendation

**Over 5kw line voltage control is operating the contactor coil only, and will draw under 1 amp.



Heavy Duty Unit Heater KB Series

Ordering Inf	ormat	ion	- three	e phase	è									
MODEL	UPC	KW	BTUH	PHASE	VOLTS	AMPS	**THERM. Control Voltage	MOTOR HP	CFM	TEMP. RISE	AIR Throw	MAX. MOUNT HEIGHT	*SIZE	WT. (lbs.)
KB4803-3MP-B2	13318	3	10.2	1-3	480	6.3	24	5W	400	37°	14ft.	8ft.	С	46.5
KB2005-3MP-B2	13370	5	17.1	1-3	208	24 & 13.9	208	9W	400	40°	16ft.	8ft.	С	46.5
KB2405-3MP-B2	22102	5	17.1	1-3	240/208*	20.8/18 & 18/15.6	240	9W	400	40°	16ft.	8ft.	С	46.5
KB4805-3MP-B2	13392	5	17.1	1-3	480	10.4 & 6	24	9W	400	40°	16ft.	8ft.	С	46.5
KB2007-3MP-B2	13450	7.5	25.6	1-3	208	36.1 & 20.8	208	16W	600	40°	20ft.	9ft.	С	46.5
KB2407-3MP-B2	13458	7.5	25.6	1-3	240/208*	31.2/27 & 18/15.6	240	16W	600	40°	20ft.	9ft.	С	46.5
KB4807-3MP-B2	13472	7.5	25.6	1-3	480	15.6 & 24	24	16W	600	40°	20ft.	9ft.	С	46.5
KB2010-3MP-B2	13542	10	34.1	1-3	208	27.7	208	25W	725	44°	24ft.	10ft.	С	46.5
KB2410-3MP-B2	13550	10	34.1	1-3	240/208*	41.6/36.1 & 24/20.8	240	25W	725	44°	24ft.	10ft.	С	46.5
KB4810-3MP-B2	13564	10	34.1	1-3	480	20.8 & 12	24	25W	725	44°	24ft.	10ft.	С	46.5
KB2012-3-B2	13620	12.5	42.7	3	208	34.6	208	35W	825	48°	30ft.	11ft.	С	46.5
KB2412-3-B2	13632	12.5	42.7	3	240/208*	30/26	240	35W	825	48°	30ft.	11ft.	С	46.5
KB4812-3MP-B2	13644	12.5	42.7	1-3	480	26 & 15	24	35W	825	48°	30ft.	11ft.	С	46.5
KB2015-3-B2	13676	15	51.2	3	208	41.6	208	50W	925	51°	33ft.	12ft.	С	46.5
KB2415-3-B2	13688	15	51.2	3	240/208*	36/31.2	240	50W	925	51°	33ft.	12ft.	С	46.5
KB4815-3MP-B2	22104	15	51.2	1-3	480	18	24	50W	925	51°	33ft.	12ft.	С	46.5
KB2020-3-B2	13734	20	68.3	3	208	55.5	208	1⁄4HP	1100	57°	47ft.	13ft.	Е	55.0
KB2420-3-B2	13738	20	68.3	3	240/208*	48.1/41.6	240	1⁄4HP	1100	57°	47ft.	13ft.	E	55.0
KB4820-3MP-B2	22105	20	68.3	1-3	480	24	24	1⁄4HP	1100	57°	47ft.	13ft.	E	55.0
KB2025-3-B2	22106	24	85.3	3	208	69.4	208	(2) 35W	1350	58°	41ft.	14ft.	F	60.5
KB2425-3-B2	13784	24	85.3	3	240/208*	60.1/52.1	240	(2) 35W	1350	58°	41ft.	14ft.	F	60.5
KB4825-3-B2	22107	24	85.3	3	480	30.1	24	(2) 35W	1350	58°	41ft.	14ft.	F	60.5
KB2030-3-B2	13806	30	102.4	3	208	83.3	208	(2) 50W	1800	53°	48ft.	15ft.	F	60.5
KB2430-3-B2	13810	30	102.4	3	240/208*	72.1/62.5	240	(2) 50W	1800	53°	48ft.	15ft.	F	60.5
KB4830-3-B2	13816	30	102.4	3	480	24	24	(2) 50W	1800	53°	48ft.	15ft.	F	60.5
KB2040-3-B2	22108	40	136.5	3	208	111	208	(2) 1⁄4HP	2200	57°	53ft.	15ft.	G	70.0
KB2440-3-B2	22109	40	136.5	3	240/208*	96.2/83.3	240	(2) 1⁄4HP	2200	57°	53ft.	15ft.	G	70.0
KB4840-3-B2	22110	40	136.5	3	480	48.1	24	(2) ¼HP	2200	57°	53ft.	15ft.	G	70.0

6" minimum clearance to walls and ceilings.

Over 5KW line voltage control is operating the contactor coil only, and will draw under 1 AMP. *Dual rated heaters will draw 13% less amps and 25% less wattage when operated at 208V.

Field Mount Accessories

MODEL	UPC	DESCRIPTION	WT. (lbs.)
KBB-1	15192	Universal Wall/Ceiling Small Mounting Bracket (for heaters with size A heaters)	1.9
KBB-2	15195	Universal Wall/Ceiling Large Mounting Bracket (for heaters with size B, C, and E)	2.6
KBB-3	13488	Universal Wall/Ceiling Large Mounting Bracket (for heaters with size F & G)	3.9
KBT	15189	Capillary Bulb-StyleThermostat Kit (single pole single throw) 25 Amp	
KBT-2	18209	Capillary Bulb-StyleThermostat Kit (double pole single throw) 25 Amp	0.5

Bracket Selection Chart

	HEATER KW SIZE USED WITH	BRACKET DIMENSIONS											
BRACKET #		L	W	Н	Α	В	C	D	Е	F	Х	Y	Z
KBB-1	3 to 5 kW (1 phase)	12½"	215/16"	101/16"	13/16"	7"	17/8"	17/8"	91⁄4"	15/8"	3⁄4"	1"	1⁄2"
KBB-2	7.5 to 15 kW (1 phase) 3 to 20 kW (3 phase)	167/8"	215/16"	101/8"	1¼"	7"	17/8"	15/8"	135/8"	15/8"	3⁄4"	1"	1½"
KBB-3	25 to 40 kW (3 phase)	19½"	43/16"	133/16"	1 5/16"	10"	17/8"	15/8"	16¼"	1 1/8"	11/16"	1"	2"



Heavy Duty Unit Heater KB Series

Factory Options

ADD SUFFIX	: DESCRIPTION
-B1	Mounting Bracket KBB-1 (included with heater size A and C)
-B2	Mounting Bracket KBB-2 (included with heater size B, and E)
-B3	Mounting Bracket KBB-3 (included with heater size F and G)
-SFR	Control Relay and 24V Transformer for Remote Summer Fan Operation
-CX	Power Contactor for 3 kW - 5kW 1-Phase Models (Line Voltage Coil)
-CT24	Transformer that Converts 208, 240 and 277 Volts to 24 Volt Control Circuit (add power contactor (-CX) for 3 kW - 5kW 1-Phase models)
-DS40	60 Amp, 3-Pole Disconnect Switch w/Padlock Provision
-DS60	60 Amp, 3-Pole Disconnect Switch w/Padlock Provision
-DS80	80 Amp, 3-Pole Disconnect Switch w/Padlock Provision
-DS100	100 Amp, 3-Pole Disconnect Switch w/Door Interlock and Padlock Provision



Electronic Unit Heater KB EC02S Series





 Model
 Code:

 KB
 24
 04
 -1
 -B2
 -ECO

 A
 B
 C
 D
 E
 F

 A: Series
 B: 20 - 208V, 24 - 240/208V
 C
 kilowatts (4 - 15)
 D: -1 = Single Phase

 E: -B2 = Universal Bracket
 F: -ECO = Electronic Control
 F: -ECO
 F: -ECO
 F: -ECO



- EC02S electronic controller
- Energy efficient 2-stage heating
- Remote control included
- Large LED display
- Patented Smart Limit® Protection
- Auto reset high limit
- Unit bearing motor
- Standard color: textured gray
- Fan only and timer modes
- Adjustable louvers
- Spiral finned heat elements
- Universal bracket included
- 5-year limited warranty



ECO2S 2-Stage Garage Heater with IR Remote Control

Thermostat timer mode (1-9 Hours)

The ECO2S KB series unit heaters offers unparalleled performance, energy efficiency and user control by incorporating another **King innovation**, the in-built ECO2S electronic thermostat with remote control. Offering energy efficient 2-stage heating, with Eco mode that automatically uses the lowest wattage needed to heat the room, integrated fan only and timer modes, as well as a remote control for simple operation. Designed for use as primary or supplemental heat sources in warehouses, stores or large garages spaces. Spiral steel elements and high CFM ensure even air distribution producing cooler element operation which prolongs the life of the heater. By combining the highest quality components, with a dynamically balanced fan blade, the KB ECO2S unit heater will provide years of trouble-free service and keep heating bills to a minimum. Includes universal wall/ceiling bracket for simple installation.

EC02S Electronic Controller Features:

- Electronic control for accuracy
- Energy-saving automatic 2-stage heating Fan only mode
- Large LED display
- Remote control and wall bracket included

Engineering Specifications

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

· Built-In fan delay

Construction: All exterior and interior metal enclosure parts are made from 20 gauge electrogalvanized Steel with a rust inhibiting baked enamel finish. Smooth rounded corners and protective edge trim give an attractive modern appearance.

Adjustable Outlet Louver: Louvers direct air up or down as needed for the heating application. Rear Intake Screen: Heavy gauge steel screen protects against foreign objects making accidental contact with the rotating fan blade.

Spiral Fin Elements: The metal sheath element is copper brazed with spiral fins then molded into a coil configuration. This combination produces the best heat transfer while eliminating the potential for hot spots by positioning the element in the maximum airflow stream.

Totally Enclosed Fan Motor: Permanently lubricated long life unit bearing motor with 20cc of oil. Epoxy-coated motor with enclosed rotor resists moisture and corrosion for long-lasting, trouble-free operation.

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

Auto-Reset Thermal Cutout: Power is disconnected from the element if an overheated condition occurs. The fan continues to run to dissipate excess heat from the element. The element is re-energized automatically when the normal operating temperature returns.

Electronic Control: Up, down temperature mode. Start/Stop. Standard on all heaters. The control voltage is equal to the line voltage (208, 240) for 5kW models. Over 5kW the line voltage control is operating the contactors. **Easy Installation:** A 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)

King Electrical Manufacturing Company / 9131 10th Avenue South, Seattle, WA 98108 / phone 206.762.0400 / fax 206.763.7738 / www.king-electric.com 107

🇄 king

Electronic Unit Heater KB EC02S Series

Ordering Information

MODEL	UPC	kilo WATTS	BTUH	PHASE	VOLTS	AMPS	MOTOR HP	CFM	temp. Rise	AIR Throw	Max Mount Height	SIZE	WT. (lbs.)
-								-	-		-	-	
KB2404-1-B2-EC0	22037	4	13.5	1	240/208*	16.6/14.4	9W	400	38°F	15 ft.	8 ft.	B	28.5
KB2004-1-B2-EC0	22045	4	13.5	1	208	19.2	9W	400	38°F	15 ft.	8 ft.	В	28.5
KB2405-1-B2-EC0	22038	5	17	1	240/208*	20.8/18	9W	400	40°F	16 ft.	8 ft.	В	28.5
KB2005-1-B2-EC0	22046	5	17	1	208	24	9W	400	40°F	16 ft.	8 ft.	В	28.5
KB2407-1-B2-EC0	22040	7.5	25.6	1	240/208*	31.2/27	16W	600	40°F	20 ft.	9 ft.	В	28.5
KB2007-1-B2-EC0	22048	7.5	25.6	1	208	36.1	16W	600	40°F	20 ft.	9 ft.	В	29
KB2410-1-B2-ECO	22042	10	34.1	1	240/208*	41.6/36.1	25W	725	44°F	24 ft.	10 ft.	В	42
KB2010-1-B2-EC0	22050	10	34.1	1	208	48.1	25W	725	44°F	24 ft.	10 ft.	В	34
KB2412-1-B2-ECO	22043	12.5	42.7	1	240/208*	52/45.1	35W	825	48°F	30 ft.	11 ft.	С	32
KB2012-1-B2-EC0	22051	12.5	42.7	1	208	60.1	35W	825	48°F	30 ft.	11 ft.	С	32
KB2415-1-B2-EC0	22044	15	51.2	1	240/208*	62.5/54.1	50W	925	51°F	33 ft.	12 ft.	С	37
KB2015-1-B2-EC0	22052	15	51.2	1	208	72.1	50W	925	51°F	33 ft.	12 ft.	С	37

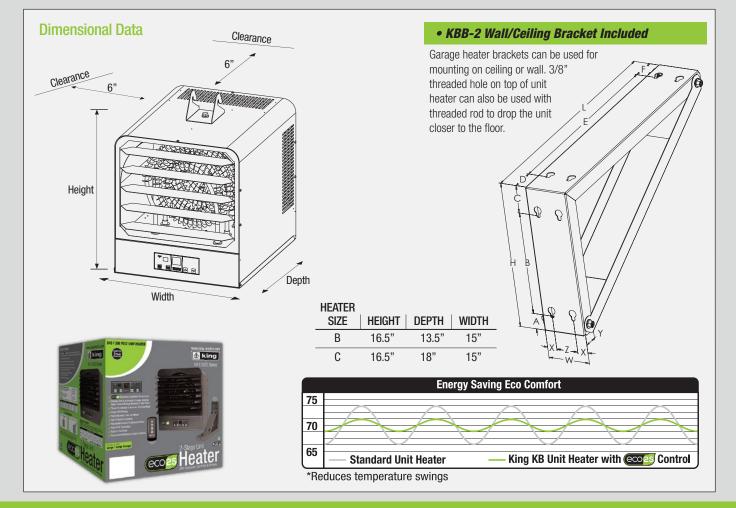
*Dual rated heaters will draw 13% less amps and 25% less wattage when operated at 208V.

Replacement Accessories

MODEL	DESCRIPTION	WT. (lbs.)
61747	ECO2S Replacement Infrared Remote Control	0.125

Bracket Selection Chart

HEATER KW SIZE						BRACKE	T DIMEN	SIONS					
BRACKET #	USED WITH	L	W	Н	Α	В	C	D	Е	F	Х	Y	Z
KBB-2	4 to 15 kW (1 phase)	167/8"	215/16"	101/8"	1¼"	7"	17/8"	15/8"	135/8"	15/8"	3⁄4"	1"	1½"





-FB

Electronic Unit Heater KB Platinum Series





- Electronic temperature controller
- Large LED display

Remote control included

- Fan only & timer modes

- Fan delav

EN M

- Adjustable louvers
 - Unit bearing motor
- Spiral finned heat elements
- Patented Smart Limit Protection® = Standard color: textured gray
 - Universal mounting bracket included
 - 5-year limited warranty



Model Code: 48 10 -1 -P

B: 20 - 208V, 24 - 240/208V 27 - 277V, 48 - 480V

C: kiloWatts (4-66) D: -1 = Single Phase -3 = Three Phase -3MP = 1-3 Phase E: -B1 = Platinum Controller

F: FB = Fuse Block

KB

R C D

A: Series

The KB Platinum Horizontal Unit Heater

King's KB Platinum series unit heaters are the most full-featured unit heaters on the market, with in-built electronic thermostat for accuracy and remote control for simple operation. With integrated summer fan only and thermostat timer mode, the KB Platinum has you covered. Designed for use as primary or supplemental heat sources in large or exposed areas, including high-rise buildings, stores, warehouses, garages, water treatment and fire room vaults to prevent freezing. Spiral finned steel elements and high CFM ensure even air distribution producing cooler element operation, prolonging heater life. By combining the highest quality components, with a dynamically balanced fan blade, the KB Platinum unit heater will provide years of trouble-free service. Includes universal wall/ceiling bracket for simple installation.

Platinum Electronic Controller Features

- Electronic control for accuracy
- Thermostat timer mode (1-9 Hours)
- Summer Fan only mode
- Large LED display
- Built-In fan delay
- · Remote control and wall/ceiling bracket included
- Heaters above 20kW are EC02S 2-stage heaters

Engineering Specifications





Contractor shall supply and install KB 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 metal enclosure parts are made from 20 gauge electrogalvanized Steel with a rust inhibiting baked enamel finish. Smooth rounded corners and protective edge trim give an attractive modern appearance.

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

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

Spiral Fin Elements: The metal sheath element is copper brazed with spiral fins then molded into a coil configuration. This combination produces the best heat transfer while eliminating the potential for hot spots by positioning the element in the maximum airflow stream.

Totally Enclosed Fan Motor: Permanently lubricated long life, unit bearing with 20cc of oil. Epoxy-coated motor with enclosed rotor resists moisture and corrosion for long-lasting, trouble-free operation.

Aluminum Fan Blade: Axial flow-type fan mounted directly to the motor shaft for maximum efficiency.

Thermal Overload: Heaters shall be 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. Internal Controls: Magnetic contactors are standard on all 480V heaters, all 208V/1-Phase, 240V/1-Phase, 277V/1-Phase heaters above 6kW, and all 3-Phase heaters. The control voltage is equal to the line voltage (208, 240 or 277) except for 480V models where a transformer is provided for 24V control. Over 5kW the line voltage control is operating the contactor coil only and will draw only 1 Amp. See page 64 for control voltages. Fusing: Internal circuit fusing is provided when the heater ampacity exceeds

48 Amps to comply with N.E.C. standards. A fan delay is provided standard on models 12.5-kW and above to dissipate residual heat from the heating elements.

Easy Installation: A guick 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)



Electronic Unit Heater KB Platinum Series

MODEL	UPC	KW	BTUH	PHASE	VOLTS	AMPS	MOTOR HP	CFM	TEMP. RISE	AIR Throw	MAX. MOUNT HEIGHT	*SIZE	WT. (Ibs.)
KB2003-1-P	13312	3	10.2	1	208	14.4	9W	400	37°	15ft.	8ft.	А	30.5
<b2403-1-p< td=""><td>13313</td><td>3</td><td>10.2</td><td>1</td><td>240/208*</td><td>12.5</td><td>9W</td><td>400</td><td>37°</td><td>15ft.</td><td>8ft.</td><td>A</td><td>30.5</td></b2403-1-p<>	13313	3	10.2	1	240/208*	12.5	9W	400	37°	15ft.	8ft.	A	30.5
(B2703-1-P	13314	3	10.2	1	277	10.8	9W	400	38°	15ft.	8ft.	A	30.5
(B2004-1-P	13315	4	13.5	1	208	19.2	9W	400	38°	15ft.	8ft.	A	30.5
(B2404-1-P	13316	4	13.5	1	240/208*	16.7/14.4	9W	400	38°	15ft.	8ft.	A	30.5
(B2704-1-P	13317	4	13.5	1	277	14.4	9W	400	38°	15ft.	8ft.	A	30.5
(B2005-1-P	13323	5	17	1	208	24.0	9W	400	40°	16ft.	8ft.	A	30.5
(B2000 1 1 (B2405-1-P	13324	5	17	1	240/208*	20.8/18	9W	400	40°	16ft.	8ft.	A	30.5
(B2705-1-P	13325	5	17	1	277	18.1	9W	400	40°	16ft.	8ft.	A	30.5
(B2007-1-P	13326	7.5	25.6	1	208	36.1	16W	600	40°	20ft.	9ft.	B	45.0
(B2007-1-P	13327	7.5	25.6	1	240/208*	31.3/27	16W	600	40°	2011. 20ft.	9ft.	B	45.0
(B2707-1-P	13328	7.5	25.6	1	240/200	27.1	16W	600	40°	2011. 20ft.	9ft.	B	45.0
(B2010-1-P	13329	<u> </u>	34.1	1	208	48.0	25W	725	40 44°	2011. 24ft.	10ft.	B	45.0
(B2410-1-P (B2710-1-P	13330 13331	10 10	34.1 34.1	1	240/208* 277	41.6/36.1 36.1	25W 25W	725 725	44° 44°	24ft. 24ft.	10ft. 10ft.	B B	45.0 45.0
			-										
(B2012-1-P-FB	13404		42.7	1	208	60.1	25W	825	48°	30ft.	11ft.	C	50.0
(B2412-1-P-FB	13405		42.7	1	240/208*	52.1/45.1	35W	825	48°	30ft.	11ft.	C	50.0
(B2015-1-P-FB	13406	15	51.2	1	208	72.1	50W	925	51°	33ft.	12ft.	C	50.0
(B2415-1-P-FB	13407	15	51.2	1	240/208*	62.5/54.1	50W	925	51°	33ft.	12ft.	С	50.0
(B2003-3MP-P	13332	3	10.2	1-3	208	14.4/8.3	9W	400	37°	14ft.	8ft.	С	45.0
(B2403-3MP-P	13333	3	10.2	1-3	240/208*	62.5/54.1	9W	400	37°	14ft.	8ft.	С	45.0
(B4803-3MP-P	13348	3	10.2	1-3	480	6.3/3.6	9W	400	37°	14ft.	8ft.	С	45.0
(B2005-3MP-P	13334	5	17.1	1-3	208	24 & 13.9	9W	400	40°	16ft.	8ft.	С	45.0
(B2405-3MP-P	13335	5	17.1	1-3	240/208*	20.8/18 & 18/15.6	9W	400	40°	16ft.	8ft.	С	45.0
(B4805-3MP-P	13349	5	17.1	1-3	480	10.4 & 6.0	9W	400	40°	16ft.	8ft.	С	45.0
KB2007-3MP-P	13336	7.5	25.6	1-3	208	36.1 & 20.8	16W	600	40°	20ft.	9ft.	С	46.5
KB2407-3MP-P	13337	7.5	25.6	1-3	240/208*	31.2/27 & 18/15.6	16W	600	40°	20ft.	9ft.	С	46.5
KB4807-3MP-P	13350	7.5	25.6	1-3	480	31.3/18.1	16W	925	51°	33ft.	12ft.	С	46.5
KB2410-3MP-P	13338	10	34.1	1-3	240/208*	41.7/36.1 & 24.1/20.8	25W	725	44°	24ft.	10ft.	С	46.5
KB4810-3MP-P	13351	10	34.1	1-3	480	20.8 & 12	25W	725	44°	24ft.	10ft.	С	46.5
KB4812-3MP-P	13401	12.5	42.7	1-3	480	26 & 15	25W	825	48°	30ft.	11ft.	С	46.5
KB4815-3MP-P	13402	15	51.2	1-3	480	31.3 & 18.1	50W	925	51°	33ft.	12ft.	С	46.5
KB2010-3MP-P	13343	9.98	47.9	3	208	27.7	25W	825	48°	30ft.	11ft.	С	46.5
<b2012-3-p< td=""><td>13344</td><td>12.5</td><td>42.7</td><td>3</td><td>208</td><td>34.7</td><td>35W</td><td>825</td><td>48°</td><td>30ft.</td><td>11ft.</td><td>С</td><td>50.0</td></b2012-3-p<>	13344	12.5	42.7	3	208	34.7	35W	825	48°	30ft.	11ft.	С	50.0
<b2412-3-p< td=""><td>13345</td><td>12.5</td><td>42.7</td><td>3</td><td>240/208*</td><td>30.1/26</td><td>35W</td><td>825</td><td>48°</td><td>30ft.</td><td>11ft.</td><td>С</td><td>50.0</td></b2412-3-p<>	13345	12.5	42.7	3	240/208*	30.1/26	35W	825	48°	30ft.	11ft.	С	50.0
<b2015-3-p< td=""><td>13346</td><td>15</td><td>51.2</td><td>3</td><td>208</td><td>41.7</td><td>50W</td><td>925</td><td>51°</td><td>33ft.</td><td>12ft.</td><td>С</td><td>50.0</td></b2015-3-p<>	13346	15	51.2	3	208	41.7	50W	925	51°	33ft.	12ft.	С	50.0
(B2415-3-P	13347	15	51.2	3	240/208*	36.1/31.2	50W	925	51°	33ft.	12ft.	С	50.0
(B2020-3-P-FB	13408	20	68.3	3	208	55.6	1/4 HP	1100	57°	47ft.	13ft.	E	55.0
(B2420-3-P-FB	13409	20	68.3	3	240/208*	48.2/41.6	1/4 HP	1100	57°	47ft.	13ft.	E	55.0
(B4820-3-P	13416	20	68.3	3	480	24.1	1/4 HP	1100	57°	47ft.	13ft.	E	55.0
KB2025-3-P-FB		25	85.3	3	208	69.5	(2) 35W	1100	57°	47ft.	13ft.	F	60.5
KB2425-3-P-FB		25	85.3	3	240/208*	60.2/52.1	(2) 35W	1350	58°	41ft.	14ft.	F	60.5
KB4825-3-P	13439	25	85.3	3	480	30.1	(2) 35W	1350	58°	41ft.	14ft.	F	60.5
KB2030-3-P-FB		30	102.4	3	208	83.4	(2) 50W	1800	53°	48ft.	15ft.	F	60.5
KB2430-3-P-FB		30	102.4	3	240/208*	72.3/62.5	(2) 50W	1800	53°	48ft.	15ft.	F	60.5
KB4830-3-P	13440	30	102.4	3	480	36.1	(2) 50W	1800	53°	48ft.	15ft.	F	60.5
KB2440-3-P-FB			136.5	3	240	96.3/83.3	(2) 1/4 HP	2200	57°	53ft.	15ft.	F	60.5
KB4840-3-P-FB			136.5		480		(2) 1/4 HP		57°	53ft.	15ft.	G	60.5

Maximum mounting height is manufacturer's recommendation

*Dual rated heaters will draw 13% less amps and 25% less wattage when operated at 208V. *2-Stage heating standard.



Electronic Unit Heater KB Platinum Series

Field Mount Options

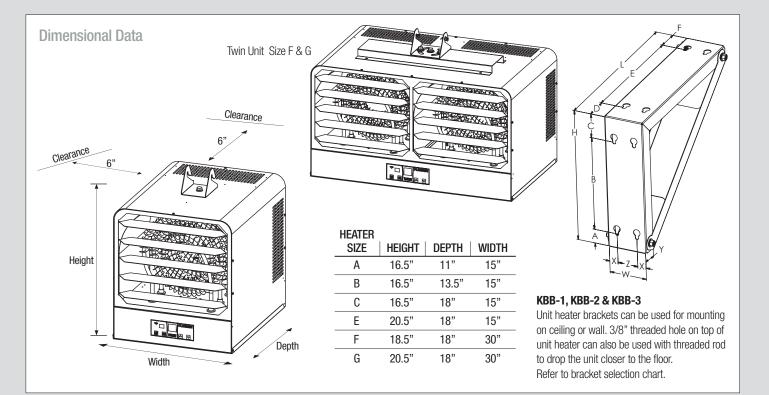
ADD SUFFIX:	UPC	DESCRIPTION
DS32	13480	Disconnect Switch, Field Installed Kit, 32 AMP, 600V
DS63	13481	Disconnect Switch, Field Installed Kit, 63 AMP, 600V
DS80	13482	Disconnect Switch, Field Installed Kit, 80 AMP, 600V
DS100	13483	Disconnect Switch, Field Installed Kit, 100 AMP, 600V

Replacement Accessories

MODEL	UPC	DESCRIPTION	WT. (lbs.)
KBB-1	13484	Replacement Universal Wall/Ceiling Small Mounting Bracket (for heaters with size A heaters)	1.9
KBB-2	13485	Replacement Universal Wall/Ceiling Large Mounting Bracket (for heaters with size B and C)	2.6
KBB-3	13488	Replacement Universal Wall/Ceiling Large Mounting Bracket (for heaters with size F & G)	3.9
KBHS	13486	Replacement Hook Swivel	0.4
KBHK	13487	Replacement Hardware Kit	0.1
61747	61747	Platinum Replacement Infrared Remote Control	0.1

Bracket Selection Chart

	HEATER KW SIZE	BRACKET DIMENSIONS											
BRACKET #	USED WITH	L	W	Н	Α	В	C	D	Е	F	Х	Y	Z
KBB-1	3 to 5 kW (1 phase)	12½"	215/16"	101/16"	1 3/16"	7"	17/8"	17/8"	91⁄4"	17/8"	3⁄4"	1"	1⁄2"
KBB-2	7.5 to 10 kW (1 phase) 3 to 20 kW (3 phase)	167/8"	215/16"	101/8"	1¼"	7"	17/8"	15/8"	135/8"	15/8"	3⁄4"	1"	1½"
KBB-3	25 to 40 kW (3 phase)	19½"	43/16"	133/16"	1 5/16"	10"	17/8"	15/8"	16¼"	11/8"	11/16"	1"	2"





Stainless Steel Unit Heater KBS Series





- Adjustable discharge louvers
- Auto-reset limit
- Long life unit bearing motor

- Padlock disconnect
- Spiral finned element
- Totally enclosed motor
- Pilot light Aluminum fan blade
- N.E.M.A. 4 enclosure 2-year limited warranty

Model Code:

B: 20 - 208V, 24 - 240V 27 - 277V. 48 - 480V C: KiloWatts D: -1 Phase, -3 Phase

B A: Series 10

c(UL)us

KBS 48

A

The KBS Stainless Steel Unit Heater

KBS unit heaters are specially constructed for heating of, and freeze protection in, dirty, dusty or corrosive areas requiring periodic washing or hose-down. Typical places of use are: waste water treatment plants, car/truck washes, cement plants, steel mills or such, canneries and dairy facilities, ship and marine docks, fish processors and load banks for generators. The heater is constructed from 18-gauge type 304 Stainless Steel and elements making it extremely corrosion resistant. The N.E.M.A. 4 wiring compartment is sealed and gasketed making it water tight. All optional control components are U.L. listed for use in N.E.M.A. 4 enclosures.

Factory Installed Options Fan Delay: Standard above 11kW Power Contactor: (when not standard) 24 Volt Control: (when not standard)

Mounting: Universal mounting bracket made from Stainless Steel included.

NEMA 4 Control Options:

•SPST thermostat

- •Two stage thermostat (single phase only)
- •Summer fan switch
- Pilot light (power on indicator)
- Padlock disconnect

Engineering Specifications

Contractor shall supply and install KBS Series Stainless Steel heaters, manufactured by King Electrical Mfg. Company. Heaters shall be of the wattage and voltage as indicated on the plans.

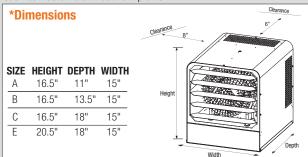
Stainless Steel Construction: All exterior and interior metal enclosure parts are made from 18 gauge type 304 Stainless Steel. All fasteners and hardware are Stainless Steel.

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

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

N.E.M.A. 4 Enclosure: Every electrical component in the wiring compartment is sealed with a polyurethane adhesive. The bottom access panel is sealed with a 1/4" high density polyurethane gasket. This provides excellent protection against corrosion, windblown dust, dirt, and rain, splashing water and hose-directed water. All optional control accessories are N.E.M.A. 4 rated.

Stainless Steel Spiral Fin Elements: The metal sheath element is brazed with spiral fins then molded in to a coil configuration. This combination produces the best heat transfer while eliminating the potential for hot spots by positioning the element in the maximum air flow stream. Stainless steel increases element life in extremely corrosive environments such as waste water treatment plants.



Totally Enclosed Fan Motor: Permanently lubricated, long life unit bearing coated motor with enclosed rotor resists moisture and corrosion for long-lasting, trouble-free operation.

Aluminum Fan Blade: Axial flow-type mounted directly to the motor shaft for maximum efficiency.

Manual Reset Limit Electrically Held: Power is disconnected from the heater if an overheated condition occurs. The heater is re-energized automatically when the normal operating temperature returns. Internal Controls: Magnetic contactors are standard on all 480V heaters, all 208V/1-Phase, 240V/1-Phase, 277V/1-Phase heaters above 5kW, and all 3-Phase heaters. The control voltage is equal to the line voltage (208, 240 or 277) except for 480V models where a transformer is provided for 24V control. Over 5kW the line voltage control is operating the contactor coil only and will draw only 1 Amp. **Fusing:** Internal circuit fusing is provided when the heater ampacity exceeds 48 Amps to comply with UL standards. A fan delay is provided standard on models 12.5-kW and above to dissipate residual heat from the heating elements.

Approvals: cULus

Accessories

1.00000011	00		
MODEL	DESCRIPTION	UPC#	WT. (lbs)
KBB-1-SS	Mounting Bracket - Small	15254	3
KBB-2-SS	Mounting Bracket - Large	15256	4
TF115	Single Pole Wall Mount Thermostat N.E.M.A. 4X - 25A SPDT	19150	1



Stainless Steel Unit Heater KBS Series

MODEL	UPC	KW	BTUH	PHASE	VOLTS	AMPS	**THERM. Control Voltage	MOTOR HP	CFM	TEMP. RISE	AIR Throw	MAX. MOUNT HEIGHT	*SIZE	WT. (Ibs.)
KBS2003-1-B1	22118	3	10.2	1	208	14.4	208	9W	400	40°	16ft.	8ft.	А	30.5
KBS2403-1-B1	22217	3	10.2	1	240	12.5	240	9W	400	40°	16ft.	8ft.	Α	30.5
KBS2703-1-B1	22218	3	10.2	1	277	10.8	277	9W	400	40°	16ft.	8ft.	Α	30.5
KBS2005-1-B1	22124	5	17	1	208	24	208	9W	400	40°	16ft.	8ft.	Α	30.5
KBS2405-1-B1	20847	5	17	1	240/208*	20.8/18	240	9W	400	40°	16ft.	8ft.	Α	30.5
KBS2705-1-B1	22127	5	17	1	277	18.1	277	9W	400	40°	16ft.	8ft.	Α	30.5
KBS4805-1-B1	22128	5	17	1	480	10.4	24	9W	400	40°	16ft.	8ft.	Α	30.5
KBS2007-1-B1	22133	7.5	25.6	1	208	36.1	208	16W	600	40°	20ft.	9ft.	В	45.0
KBS2407-1-B1	22137	7.5	25.6	1	240/208*	31.2/27	240	16W	600	40°	20ft.	9ft.	В	45.0
KBS2707-1-B1	22219	7.5	25.6	1	277	27	277	16W	600	40°	20ft.	9ft.	В	45.0
KBS4807-1-B1	22142	7.5	25.6	1	480	15.6	24	16W	600	40°	20ft.	9ft.	В	45.0
KBS2010-1-B2	22147	10	34.1	1	208	48.1	208	25W	725	44°	24ft.	10ft.	В	45.0
KBS2410-1-B2	22151	10	34.1	1	240/208*	41.6/36.1	240	25W	725	44°	24ft.	10ft.	В	45.0
KBS2710-1-B2	22154	10	34.1	1	277	36.1	277	25W	725	44°	24ft.	10ft.	В	45.0
KBS4810-1-B2	22155	10	34.1	1	480	20.8	24	25W	725	44°	24ft.	10ft.	В	45.0
KBS2012-1-B2	22159	12.5	42.7	1	208	60.1	208	35W	825	48°	30ft.	11ft.	С	46.5
KBS2412-1-B2	22163	12.5	42.7	1	240/208*	52/45.1	240	35W	825	48°	30ft.	11ft.	С	46.5
KBS2020-3-B2	22173	20	68.3	3	208	55.5	208	50W	1100	57°	47ft.	13ft.	С	46.5
KBS2420-3-B2	20849	20	68.3	3	240/208*	48.1/41.6	240	50W	1100	57°	47ft.	13ft.	С	46.5
KBS2403-3MP-B2	22222	3	10.2	1-3	240/208*	12.5/7.2	240	9W	400	40°	16ft.	8ft.	С	46.5
KBS4803-3MP-B2	22120	3	10.2	1-3	480	6.3	24	9W	400	40°	16ft.	8ft.	С	46.5
KBS2005-3MP-B2		5	17.1	1-3	208	24 & 13.9	208	9W	400	40°	16ft.	8ft.	С	46.5
KBS2405-3MP-B2		5	17.1	1-3	240/208*	20.8/18 & 18/15.6	240	9W	400	40°	16ft.	8ft.	С	46.5
KBS4805-3MP-B2	20850	5	17.1	1-3	480	10.4 & 6	24	9W	400	40°	16ft.	8ft.	С	46.5
KBS2007-3MP-B2	22135	7.5	25.6	1-3	208	36.1 & 20.8	208	16W	600	40°	20ft.	9ft.	С	46.5
KBS2407-3MP-B2	22139	7.5	25.6	1-3	240/208*	31.2/27 & 18/15.6	240	16W	600	40°	20ft.	9ft.	С	46.5
KBS4807-3MP-B2	20717	7.5	25.6	1-3	480	15.6 & 24	24	16W	600	40°	20ft.	9ft.	С	46.5
KBS2010-3MP-B2	22149	10	34.1	1-3	208	27.7	208	25W	725	44°	24ft.	10ft.	С	46.5
KBS2410-3MP-B2	20848	10	34.1	1-3	240/208*	41.6/36.1 & 24/20.8	240	25W	725	44°	24ft.	10ft.	С	46.5
KBS4810-3MP-B2	20851	10	34.1	1-3	480	20.8 & 12	24	25W	725	44°	24ft.	10ft.	С	46.5
KBS2012-3-B2	22161	12.5	42.7	3	208	34.6	208	35W	825	48°	30ft.	11ft.	С	46.5
KBS2412-3-B2	22164		42.7	3	240/208*	30/26	240	35W	825	48°	30ft.	11ft.	С	46.5
KBS4812-3MP-B2	22166		42.7	1-3	480	26 & 15	24	35W	825	48°	30ft.	11ft.	С	46.5
KBS2015-3-B2	22169	15	51.2	3	208	41.6	208	35W	925	51°	33ft.	12ft.	С	46.5
KBS2415-3-B2	22171	15	51.2	3	240/208*	36/31.2	240	35W	925	51°	33ft.	12ft.	С	46.5
KBS4815-3MP-B2	22224	15	51.2	1-3	480	18	24	35W	925	51°	33ft.	12ft.	С	46.5
KBS4820-3MP-B2	20852	20	68.3	1-3	480	41.6/24.1	24	50W	1100		37 ft.	12ft.	E	55.0

*Dual rated heaters will draw 13% less amps and 25% less wattage when operated at 208V.

Options

SUFFIX	DESCRIPTION
-T	1-Pole Unit Mounted Thermostat (temperature range 40°F - 100°F)
-2TS	2-Stage Thermostat (Single Phase models only
-B1	Mounting Bracket KBB-1 (included with heater size A)
-B2	Mounting Bracket KBB-2 (included with heater size B and C)
-SF	Summer Fan Switch
-SFR	Control Relay and 24V Transformer for Remote Summer Fan Operation
-PI	Pilot Light (power ON indication)

Ordering Information

Options

option	
SUFFIX	DESCRIPTION
-CX	Power Contactor for 3 kW - 5kW 1-Phase Models (Line Voltage Coil)
-CT24	Transformer that Converts 208, 240 and 277 Volts to 24 Volt Control Circuit
	{add power contactor (-CX) for 3 kW-5kW 1-Phase models}
-DS32	Disconnect Switch, Field Installed Kit, 32 AMP, 600V
-DS63	Disconnect Switch, Field Installed Kit, 63 AMP, 600V
-DS80	Disconnect Switch, Field Installed Kit, 80 AMP, 600V
-DS100	Disconnect Switch, Field Installed Kit, 100 AMP, 600V



High Air Velocity Unit Heater KFUH Series



	Model C	ode:	
KFUH	48	10	-3
Α	B	C	D
A: Se	eries		
B: 20	- 208V	24 - 240	V
48	- 480V		
C: Ki	lowatts		
D: 1	or 3-pha	se	



Shown with KFUH DIFFUSER. **KFUH DIFFUSER required for** this heater and is sold separately

- Heavy duty open coil element
- Direct drive air over type motor = 22 gauge steel
- Dual inlet industrial blower
- Horizontal or Vertical Mount
- Adjustable louver hood (sold separately) Can be ducted on intake and outlet
- Quiet switching relays
- Replaceable intake filter
- 24 Volt control
- Fan-only relay
- ECM Motor (optional)



The KFUH High Air Velocity Unit Heater

The KFUH series commercial unit heater is an efficient, dependable unit heater perfectly suited for high ceiling applications such as warehouses, parking garages and docks. The 3-speed, high-capacity motor and blower quietly delivers large volumes of air ranging from 775 to 1540 CFM minimum. With welded mounting channels on the unit, the heater may be mounted at any angle. Safety screens are provided at both the air intake and discharge aperature. The intake filter is replaceable. Thermostat may be ordered separately.

FIELD WIRING: 208 and 240 volt unit heaters are equipped with circuit breakers to provide internal circuit protection when heater exceeds 48 amps. 480 Volt unit heaters do not have circuit breakers but are fused when internal protection is required over 48 Amps. Terminal blocks are supplied for field wiring on all units. Consult the National Electric Code for proper wire size and service circuit breaker protection.

CONTROL WIRING: Connect low voltage thermostat to terminals R and W on the low voltage terminal block. For fan only operation connect terminals R and G with a switch or thermostat fan switch.

Unit shown with standard diffuser model # KFUH DIFFUSER ordered separately. Additional diffusers are located on the 3rd page of this specification sheet.

Engineering Specifications

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

Transformer: Each unit is equipped with a heavy duty low voltage (24 Volt) transformer for the thermostat control circuit.

Heating Elements: Quick heating, long life Ni-Chrome elements are sized to provide proper watt density for maximum heat dissipation by fan-forced air convection currents.

Terminal Block: For single strike field wiring.

Low Voltage Terminal Block: For 24 Volt control.

Air Filter: Convenient access for replacement of standard 16" x 20" x 1" filter.

Motor: Long life, 48 frame capacitor run, thermally protected, permanently lubricated, direct drive motor (no belts to adjust or slip). This low noise, up to 3-speed motor is designed for maintenance-free operation.

Overcurrent Protection: 208 and 240 volt KFUH models have 60 amp circuit breakers with single strike terminal block. 480 volt models have single strike terminal block. Units over 48 amps have 60 amp fusing.

Limit Control: Integral automatic high temperature limit control in each heating element bank prevents the delivery of air at unsafe temperatures. 20-35 kW use a manual reset limit control to completely shut the unit heater off should overtemperature occur.

Fan Relay: Heavy duty fan relay standard with summer fan operation. Approvals: UL (E41422)

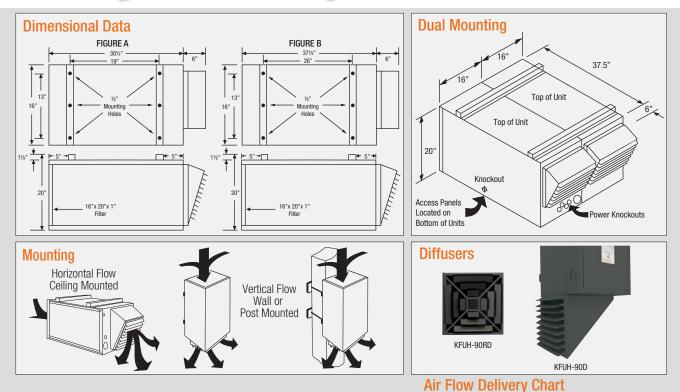
High Air Velocity Unit Heater KFUH Series

Ordering Information

MODEL	kilo MODEL VOLTS watts BTU				# of ELEMENTS	MOTOR HP		IPERA ISE (° MED		SIZE	WT. (lbs)
KFUH2003-1	208	3	10.2	14.4	1	1/5	12°	11°	9°	Fig. A	57
KFUH2404-1	240	4	13.6	16.7	1	1/5	16°	15°	13°	Fig. A	57
KFUH2005-1	208	5	17.1	24	1	1/5	20°	18°	16°	Fig. A	57
KFUH2405-1	240	5	17.1	20.8	1	1/5	20°	18°	16°	Fig. A	57
KFUH4805-1	480	5	17.1	10.4	1	1/5	20°	18°	16°	Fig. A	57
KFUH2006-1	208	6	20.5	25	2	1/5	24°	22°	19°	Fig. A	57
KFUH2408-1	240	8	26.9	33.3	2	1/5	33°	29°	25°	Fig. A	65
KFUH2010-1	208	10	34.1	48	2	1/5	41°	37°	32°	Fig. A	65
KFUH2410-1	240	10	34.1	41.7	2	1/5	41°	37°	32°	Fig. A	65
KFUH4810-1	480	10	34.1	20.8	2	1/5	41°	37°	32°	Fig. A	65
KFUH2412-1	240	11.5	39.2	47.9	2	1/5	47°	42°	36°	Fig. A	65
KFUH4812-1	480	11.5	39.2	23.9	2	1/5	47°	42°	36°	Fig. A	65
KFUH2015-1	208	15	51.2	72.1	3	1/5	61°	55°	47°	Fig. A	74
KFUH2415-1	240	15	51.2	62.5	3	1/5	61°	55°	47°	Fig. A	74
KFUH4815-1	480	15	51.2	31.2	3	1/5	61°	55°	47°	Fig. A	74
KFUH2418-1	240	17.25	58.8	82.9	3	1/5	70°	63°	55°	Fig. A	74
KFUH4818-1	480	17.25	58.8	35.9	3	1/5	70°	63°	 55°	Fig. A	74
KFUH2020-1	208	20	68.3	96.2	4	1/3	57°	51°	41°	Fig. B	76
KFUH2420-1	240	20	68.3	83.3	4	1/3	57°	51°	41°	Fig. B	76
KFUH4820-1	480	20	68.3	41.7	4	1/3	57°	51°	41°	Fig. B	76
KFUH2025-1	208	25	85.3	120.2	5	1/3		 63°	 51°	Fig. B	81
KFUH2425-1	240	25	85.3	104.2	5	1/3	72°	<u>63</u> °	51°	Fig. B	81
KFUH4825-1	480	25	85.3	52.1	5	1/3	72°	63°	51°	Fig. B	81
KFUH2030-1	208	30	102.4	144.2	6	1/3	86°	 76°	62°	Fig. B	85
KFUH2430-1	200	30	102.4	125	6	1/3	 86°	76°	62°	Fig. B	85
KFUH4830-1	480	30	102.4	62.5	6	1/3	 86°	76°	62°	Fig. B	85
KFUH2435-1	240	34.5	117.7	143.7	6	1/3	<u> </u>	87°	71°	Fig. B	85
KFUH2435-1 KFUH4835-1	480	34.5	117.7	71.8	6	1/3	<u>99</u> °	87°	71°	0	85
KI UH4035-1	400		111.1	71.0		1/5	TEN	IPERA	TURE	Fig. B	
MODEL	VOLTS	kilo watts	BTUH	AMPS	# of ELEMENTS	MOTOR HP		ISE (° MED	F) HIGH	SIZE	WT. (lbs)
KFUH2405-3	240	5	17.1	13	3	1/5	30°	25°	20°	Fig. A	74
KFUH4805-3	480	5	17.1	7	3	1/5		25°	20°	Fig. A	74
KFUH2009-3	208	9	30.7	21.6	3	1/5	37°	 33°	 28°	Fig. A	74
KFUH2410-3	240	10	34.1	24.1	3	1/5	41°	37°	32°	Fig. A	74
KFUH4810-3	480	10	34.1	12	3	1/5	41°	37°	32°	Fig. A	74
KFUH2012-3	208	11.25	38.4	31.2	3	1/5	46°	41°	35°	Fig. A	74
KFUH2412-3	240	12	40.9	28.9	3	1/5	49°	44°	38°	Fig. A	74
KFUH4812-3	480	12	40.9	14.4	3	1/5	49°	44°		Fig. A	74
KFUH2015-3	208	15	51.2	41.6	3	1/5	61°	55°	47°	Fig. A	74
KFUH2415-3	240	15	51.2	36.1	3	1/5	61°	55°	47°	Fig. A	74
KFUH4815-3	480	15	51.2	18.1	3	1/5	61°	55°	47°	Fig. A	74
KFUH2418-3	240	17.25	58.8	43.3	3	1/5	70°	 63°	55°	Fig. A	74
KFUH4818-3	480	17.25	58.8	20.7	3	1/5	70°	63°	55°	Fig. A	74
KFUH2420-3	240	20	68.3	48	4	1/5	57°	51°	41°	Fig. B	85
	480	20	68.3	24		1/5	57°	51°	41°		85
KFUH4820-3 KFUH2022-3	208	20	76.8	62.5	4 6	1/3	64°	56°	41 46°	Fig. B Fig. B	85
KFUH2022-3	208	22.5	81.6	57.7	6	1/3	69°	61°	40 49°	Fig. B	85
KFUH2424-3 KFUH4824-3	480	24	81.6	28.8		1/3	69°	61°	49 49°	-	
					6					Fig. B	85
KFUH2030-3	208	30	102.4	83.3	<u> </u>	1/3 1/3	86° 86°	76° 76°	62° 62°	Fig. B Fig. B	<u>85</u> 85
	240	30							11/		00
KFUH2430-3	240	30		72.2							
KFUH4830-3	480	30	102.4	36.1	6	1/3	86°	76°	62°	Fig. B	85

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High Air Velocity Unit Heater KFUH Series



Options

ADD SUFFIX:	DESCRIPTION
-2S1	2 Stage Control 1-Phase models
-2S3	2 Stage Control 3-Phase models (5 kW increments only)
-DS40	40 Amp, 3-Pole Non-Fused Locking Disconnect Switch
-DS60	60 Amp, 3-Pole Non-Fused Locking Disconnect Switch
-DS80	80 Amp, 3-Pole Non-Fused Locking Disconnect Switch
-DS100	100 Amp, 3-Pole Non-Fused Locking Disconnect Switch
-T	1-Pole Thermostat

KFUH Diffuser Options

MODEL	UPC	DESCRIPTION	WEIGHT (lbs.)
KFUH-DIFFUSER	15741	Standard KFUH Air Diffuser	5.0
KFUH-ND	15725	No Diffuser, 1" duct collar only discharge side for connection to 14" x 14" duct	N/A
KFUH-RD	15743	Radial diffuser for wide pattern heat dispersion	4.0
KFUH-90D	15728	Right angle elbow (90°) diffuser with adjustable louvers	15.0
KFUH-90RD	15729	Right angle elbow (90°) with radial diffuser	14.0

KFUH Factory Installed Options

MODEL	UPC	DESCRIPTION	WEIGHT (lbs.)
KFUH-1/3HP	NA	Upgrade to 1/3 HP Motor & Blower for 3-18KW units	N/A
KFUH-1/2HP	NA	Upgrade to 1/2 HP Motor & Blower for 20-35KW units	N/A
KFUH-ECM	NA	Upgrade to ECM Motor 1/3 HP	N/A
KFUH-T	15747	Factory Installed Stat (SPST). Temperature range 40°F to 100°F	N/A
KFUH-2TS	15707	Factory Installed Stat (DPST). Temperature range 40°F to 100°F	N/A
KFUH-SF	15708	Factory Installed Summer Fan Switch	N/A
KFUH-2S1	15714	Control Relays & Contactor for 2-Stage Element Control, 1-Phase heaters.	N/A
	10714	Available on certain models.	
KFUH-2S3	15716	Control Relays & Contactor for 2-Stage Element Control, 3-Phase heaters.	N/A
	107 10	Available on certain models.	N/A
K-DS40	NA	Factory Installed 40 Amp, 3-Pole Non-Fused Locking Disconnect Switch	N/A
K-DS60	NA	Factory Installed 60 Amp, 3-Pole Non-Fused Locking Disconnect Switch	NA
K-DS80	NA	Factory Installed 80 Amp, 3-Pole Non-Fused Locking Disconnect Switch	N/A
K-DS100	NA	Factory Installed 100 Amp, 3-Pole Non-Fused Locking Disconnect Switch	N/A
1E30-910	19000	Wall mount thermostat, 24V, range 50°- 90°	1.0
KFUH-PTBL	17216	Kit to make KFUH Portable. Includes casters and mounting bracket (No Cord)	N/A

230³ 3.4 775 570 860 630 1/5 380 / 4601 1.7 230³ 3.2 1100² 810 1250 920 1/3 380 / 460² 1.7 230³ 3.8 1/2 1250 920 1540 1130 1750³ 1285 380 / 4601 1.9 Motor Wire Color RED BLUE

*Air Volume=Ft.3 Per Minute (CFM) *Air Velocity=Ft. Per Minute (FPM) ¹Single speed (high), ²Two speed (High/Low), ³Three speed (Low/Med/High)

LOW

MED

CFM FPM CFM FPM CFM FPM

HIGH

1000¹ 735

1540² 1130

BLACK

MOTOR SPEED

MOTOR LOAD

VOLTS AMPS

MOTOR

HP

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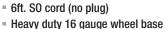
Electronic Portable Unit Heater PKB Series





- = Platinum electronic temperature controller = Patented Smart Limit Protection® = Standard color: Textured gray
- Large LED display
- Remote control included
- Fan Only & timer modes
- Adjustable louvers
- Unit bearing motor
- Spiral finned heat elements

2-year limited warranty





Model Code: 20 PKB

B: 20 - 208V. 24 - 240V 48 - 480V C: KW (10) D: 1-Phase, 3-Phase

R A: Series 10

The PKB Platinum Electronic Portable Utility Heater

King's PKB Electronic Portable Utility Heaters are the most full-featured utility heaters on the market, with in-built Platinum electronic thermostat for accuracy and remote control for simple operation. With integrated summer fan only and thermostat timer mode, the PKB Platinum has you covered. Constructed to hold up to the rigorous demands of a jobsite or industrial facility. It is the best heat source to assist in dry-out applications where dry electric heat is preferred to propane or kerosene space heaters. In addition, electric heat has no odor, flame or carbon monoxide. The high CFM and low temperature rise are also key features to make the PKB Platinum the best solution for temporary large capacity heating applications. Spiral finned steel elements and high CFM ensure even air distribution producing cooler element operation, prolonging heater life.

Ordering Information

	MODEL	KW	BTUH	PHASE	VOLTS	AMPS	CFM	SIZE	SO CORD Size
	PKB2007-1-P	7.5	25.6	1	208	36.1	600	А	8/3
	PKB2007-3-P	7.5	25.6	3	208	20.8	600	В	10/4
208V	PKB2010-1-P	10	34.1	1	208	48	725	А	6/3
	PKB2010-3-P	10	34.1	3	208	27.7	725	В	8/4
	PKB2015-1-P-FB	15	51.2	1	208	72.1	925	В	2/3
	PKB2015-3-P	15	51.2	3	208	36.1	925	В	6/4
	PKB2020-3-P-FB	20	68.2	3	208	55.5	1100	С	4/3
	PKB2407-1-P	7.5/5.6	25.6/19.2	1	240/208*	31.3/26.9	600	А	8/3
	PKB2407-3-P	7.5/5.6	25.6/19.2	3	240/208*	18.0/15.6	600	В	12/4
	PKB2410-1-P	10/7.5	34.1/25.6	1	240/208*	41.7/36.1	725	А	6/3
040/	PKB2410-3-P	10/7.5	34.1/25.6	3	240/208*	24.1/20.8	725	В	10/4
240/ 208V -	PKB2412-1-P-FB	12.5/9.4	42.7/32.0	1	240/208*	52.1/45.1	825	В	6/3
2000	PKB2412-3-P	12.5/9.4	42.7/32.0	3	240/208*	30.1/26.1	825	В	8/4
	PKB2415-1-P-FB	15/11.25	51.2/38.4	1	240/208*	62.5/54.1	925	В	4/3
	PKB2415-3-P	15/11.25	51.2/38.4	3	240/208*	36.1/54.1	925	В	6/4
	PKB2420-3-P-FB	20/15	68.2/51.20	3	240/208*	48.1/41.6	1100	С	4/4
	PKB4807-1-P	7.5	25.6	1	480	15.6	600	В	14/3
	PKB4807-3-P	7.5	25.6	3	480	9	600	В	16/4
	PKB4810-1-P	10	34.1	1	480	20.8	725	В	12/3
	PKB4810-3-P	10	34.1	3	480	12	725	В	14/4
480V	PKB4812-1-P	12.5	42.7	1	480	26	825	В	10/3
	PKB4812-3-P	12.5	42.7	3	480	15.1	825	В	12/4
	PKB4815-1-P	15	51.2	1	480	31.3	925	В	8/3
	PKB4815-3-P	15	51.2	3	480	18.1	925	В	12/4
	PKB4820-3-P	20	68.2	3	480	24.1	1100	С	10/4

*Dual rated heaters will draw 13% less amps and 25% less wattage when operated at 208V.



Electronic Portable Unit Heater PKB Series

Platinum Electronic Controller Features

- Electronic control for accuracy
- Thermostat timer mode (1-9 Hours)
- Summer Fan only mode
- Large LED display
- Built-In fan delay
- Remote control included

Engineering Specifications

POWER START STOP
MODE
King



Contractor shall supply and install PKB Series electronic utility 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 metal enclosure parts are made from 20 gauge electrogalvanized Steel with a rust inhibiting baked enamel finish. Smooth rounded corners and protective edge trim give an attractive modern appearance.

Electronic Control: Up, down temperature mode. Start/Stop. Standard on all heaters. The control voltage is equal to the line voltage (208, 240) for 5kW the line voltage control is operating the contactors.

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

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

Spiral Fin Elements: The metal sheath element is copper brazed with spiral fins then molded into a coil configuration. This combination produces the best heat transfer while eliminating the potential for hot spots by positioning the element in the maximum airflow stream.

Totally Enclosed Fan Motor: Permanently lubricated long life, unit bearing with 20cc of oil. Epoxy-coated motor with enclosed rotor resists moisture and corrosion for long-lasting, trouble-free operation.

Aluminum Fan Blade: Axial flow-type fan mounted directly to the motor shaft for maximum efficiency.

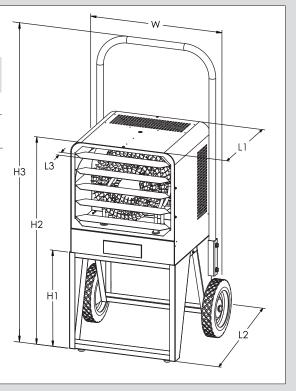
Thermal Overload: Heaters shall be equipped with King's patented thermal overload Smart Limit Protection®, which disconnects elements and motor in the event normal operating temperatures are exceeded. If thermal overload trips due to abnormal operating temperatures, thermal overload shall remain open 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. Cord Length: 6 Foot SO Cord (No Plug Provided) Approvals: cETLus (517271) & (30314521)

Options/Accessories

ADD SUFFIX	DESCRIPTION
-25C	25 foot cord option

Dimensional Data

		_					
HEATER SIZE		D	DIMENSI	ONS			
REATEN SIZE	L1	L2	L3	W	H1	H2	H3
А	13½"	17"	1"	19"	14¼"	30¼"	41¼"
В	18"	21½"	1"	19"	14¼"	30¼"	41¼"
С	24"	21½"	1"	19"	14¼"	30¼"	41¼"
Minimum C front top sides rear.	3 ft. 1 ft. 1 ft.	e					



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Industrial Portable Unit Heater PCK Series



Model Code: PCK 48 20 -3 -T -DT -YJ A B C D E F G A: Series B: 20 - 208V, 24 - 240V 48-480V C: kiloWatts (10 - 30) D: -1 = Single Phase -3 = Three Phase E: -T = Thermostat G: -YJ = Yellow Jacket

- Built-in thermostat
- 24V control for heat or fan only
- steel spiral finned elements
- Long life 3R cast iron motor
- N.E.M.A. 12" gasket construction
- 12" duct transition
- Convenient carrying handles
- Optional frame

- Outdoor rating optional
- High visibility Yellow Jacket high tensile 18GA steel enclosure
- Large capacity dual-inlet blower handles high static pressure & moves large air volumes (1500 CFM)
- 95 lbs. without frame, 125 lbs. with industrial frame

PCK Industrial Portable Unit Heater

The King PCK "Yellow Jacket" Industrial portable unit heater is constructed to hold up to the rigorous demands of a jobsite or industrial facility. This unit heater is the very BEST heat source to assist in complete "Dry-out" applications, where dry electric heat is preferred to propane or kerosene space heaters. In addition, electric heat omits absolutely no odor, flame or carbon monoxide. The high CFM and moderate temperature rise are also key features to make this unit heater the very best solution for temporary large capacity heating and dry-out applications. Comes standard with a 12" collar for adding a flexible duct to extend the heated air to where it is needed. The -IF (Industrial Frame) complies with the FAA's Airport regulations of 18 inch above the ground for air inlet of the heater to reduce the jet fuel vapor being drawn in. An Outdoor rain proof rating can be added to the portable unit heater by adding the -OR (Outdoor Rating) to the Model number. This will allow you to place the heater outside in the rain and feed heated air into a building structure, plane, container, apartment, ship or any work area requiring heated dry fresh air and not take up space in the work area. The -OR option adds an intake rain baffle and electrical compartment rain cover and is UL approved for Outdoor Use. Many options are available. We can build one for your application.

Ordering Information PHASE MODEL UPC kiloWATTS VOLTS 208V PCK2010-1 22186 10 208 PCK2010-3 22187 10 208 3 PCK2015-1 22188 15 208 1 PCK2015-3 22189 15 208 3 PCK2020-3 22190 20 208 3 PCK2025-3 22191 25 3 208 PCK2030-3 22192 30 208 3 240V PCK2410-1 10 22193 240 1 PCK2410-3 22194 10 240 3 PCK2415-1 22195 15 240 1 PCK2415-3 22196 15 240 3 PCK2420-3 22197 20 240 3 PCK2425-3 22198 25 240 3 30 3 PCK2430-3 22199 240 480V PCK4810-3 22200 10 480 3 PCK4815-3 15 480 3 22201 PCK4820-3 22202 20 480 3 PCK4825-3 25 3 22203 480 30 3 PCK4830-3 22204 480 Accessories MODEL UPC DESCRIPTION PCK-IF 22205 HEAVY DUTY INDUSTRIAL STEEL FRAME PCK-IFCS 22206 CORD STORAGE SHELF PCK-OR 22207 OUTDOOR RATING INLET RAIN BAFFLE W/ ELECTRICAL AND CORD COVER RT100 22208 REMOTE THERMOSTAT W/100 FT. CORD

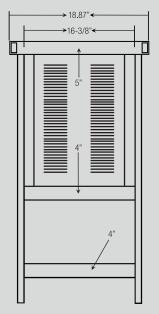
Optional heavy duty 1" x 2" steel frame for protection, convenient stackable storage and mobility from job site to job site.

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Industrial Portable Unit Heater PCK Series

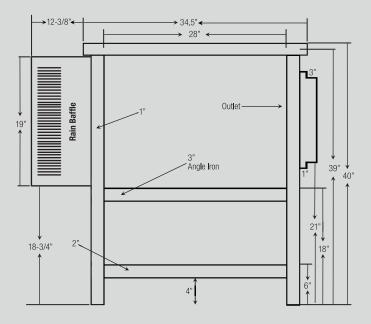


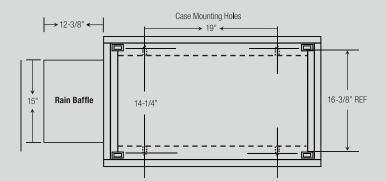
Shown with industrial steel frame and cord storage tray



Dimensional Data

#	QUANTITY	DESCRIPTION
1	4	1 X 2 X 39 Rect. tubing
2	2	1 X 2 X 28 Rect. tubing
4	4	1 X 2 X 16-3/8 Rect. tubing
5	2	1 X 2 X 18-3/8 Rect. tubing
3	2	2 X 2 X 30 Angle







Shown with ducting

Shown with short steel frame 25-1/2"

Outdoor rating inlet rain baffle with electrical and cord cover



Select The Right Type Of Heater

How To Select The Right Type Of Heater

Fan heater or baseboard?

Space: A baseboard heater takes up more wall space than a fan-forced heater which can cause problems placing furniture. (For example: a 2250 Watt Pic-A-Watt[®] heater will provide as much heat as a 9 foot baseboard.)

Comfort: A fan-forced heater will heat a room within a few minutes whereas a baseboard will require 30 to 40 minutes. A fan-forced heater will also maintain a more even temperature because the fan will circulate air around the room. This reduces the severity of hot/cold temperature swings.

Noise: A baseboard heater has no moving parts and therefore is quieter than a fan heater. The small Pic-A-Watt[®] heater uses a squirrel cage blower which makes it almost inaudible.

Efficiency: A 1500 Watt baseboard uses the same amount of electrical power as a 1500 Watt fan heater. The difference is a fan heater gives more even heat throughout the room thereby reducing air stratification (hot air rising and not mixing with the cooler floor air). This process makes you feel cooler causing you to turn the baseboard thermostat to a higher temperature setting whereby it runs more often thus using more electric power than the same size fan heater. Every 1° a thermostat is turned up will raise a power bill 3.1%. As such, a baseboard set to 75°F will cost you 15.5% more than a fan heater set to 70°F.

Which fan heater to choose?

Use: If the heater will run often and be used as primary heating for the home King recommends using heaters with steel elements such as the Pic-A-Watt[®]. These elements carry a five year warranty and will hold up to the rigors of everyday use. For supplemental or occasional use open-coil elements work fine. If budgetary constraints are of primary importance open-coil heaters are the least expensive.

Noise: A propeller-type fan will make more noise than a squirrel cage fan. Open-coil elements make more noise than steel mass elements (Pic-A-Watt[®]) due to the rate of heat exchange with the air. For large rooms, two small heaters will be quieter than one large heater.

AMPS	VOLTS	WATTS	WIRE SIZE	CIRCUIT PROTECTION
12	120	1,440	#14/2	15 Amp – 1-Pole
16 12	120	1,920	#12/2	20 Amp – 1-Pole
12	240	2,880	#14/2	15 Amp – 2-Pole
16	240	3,840	#12/2	20 Amp – 2-Pole
16 24 32	240	5,760	#10/2	30 Amp – 2-Pole
32	240	7,680	#8/2	40 Amp - 2 Pole

How To Size The Heating Circuit

1. According to the National Electric Code heating circuits are considered a continous load and therefore must be derated by 20%. (For example: a 20 Amp heating circuit cannot have more than 16 Amps ofload connected.)

2. 120 Volt heaters require 1-Pole circuit breakers; 240 Volt heaters need 2-Pole breakers.

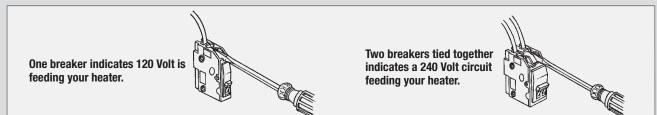
3. Use 2-wire cable with ground (Romex[™] or BX).

4. When placing multiple heaters on a circuit do not exceed the wattage listed for the corresponding wire and circuit breaker size. (For example: 2-1000W & 1-1500W, 240V heaters = 3500 Watts total. These 3 heaters would require 12/2 wire and a 20 Amp 2-Pole breaker if they were to all be placed on the same circuit. If more heaters are needed either run a new circuit or increase the wire and breaker size to accommodate the load.)

5. A 1500 Watt heater will cost the same to run whether it is 120 or 240 Volt. 240 Volt heating circuits are more common because, as the chart shows, you can place more heaters on a 20 Amp 240 Volt circuit (maximum of 3840 Watts) versus a 120 Volt circuit (maximum of 1920 Watts).

6. 120 and 240 Volt heaters are not interchangeable. A 240 Volt heater run at 120 Volt will produce 25% of the rated wattage. A 120 Volt heater run at 240 Volt will be destroyed and poses a severe fire hazard.

7. What voltage are my heaters?



Total Amperage Rating Chart

Total Amp Power KW	120V (1)	208V (1)	208V (3)	240V (1)	240V (3)	277V (1)	480V (1)	480V (3)	600V (1)	600V (3)
0.3	2.50	1.45	0.83	1.25	240V (3) 0.72	1.09	460V (1) 0.63	460V (3) 0.36	0.50	0.29
0.4	3.34	1.43	1.11	1.67	0.97	1.45	0.84	0.30	0.67	0.23
0.5	4.17	2.41	1.39	2.09	1.21	1.81	1.05	0.43	0.84	0.49
0.6	5.00	2.89	1.66	2.50	1.45	2.17	1.25	0.72	1.00	0.58
0.75	6.25	3.61	2.09	3.13	1.81	2.71	1.57	0.91	1.25	0.72
0.8	6.67	3.85	2.23	3.34	1.93	2.89	1.67	0.97	1.34	0.77
1	8.34	4.81	2.78	4.17	2.41	3.61	2.09	1.21	1.67	0.97
1.2	10.00	5.77	3.34	5.00	2.89	4.34	2.50	1.45	2.00	1.16
1.25	10.00	6.01	3.47	5.21	3.01	4.52	2.61	1.51	2.09	1.21
1.4	11.67	6.73	3.89	5.84	3.38	5.06	2.92	1.40	2.34	1.35
1.5	12.50	7.22	4.17	6.25	3.61	5.42	3.13	1.81	2.50	1.45
1.6	13.34	7.70	4.45	6.67	3.86	5.78	3.34	1.93	2.67	1.54
1.75	14.59	8.42	4.87	7.30	4.22	6.32	3.65	2.11	2.92	1.69
2	16.67	9.62	5.56	8.34	4.82	7.22	4.17	2.41	3.34	1.93
2.25	18.75	10.82	6.25	9.38	5.42	8.13	4.69	2.71	3.75	2.17
2.5	20.84	12.02	6.95	10.42	6.02	9.03	5.21	3.01	4.17	2.17
3	25.00	14.43	8.34	12.50	7.23	10.83	6.25	3.61	5.00	2.89
4	33.34	19.23	11.12	16.67	9.64	14.44	8.34	4.82	6.67	3.86
4.5	37.50	21.64	12.50	18.75	10.84	16.25	9.38	5.42	7.50	4.34
5	41.67	24.04	13.90	20.84	12.05	18.05	10.42	6.02	8.34	4.82
6	50.00	28.85	16.68	25.00	14.45	21.66	12.50	7.23	10.00	5.78
7.5	62.50	36.06	20.84	31.25	18.06	27.08	15.63	9.03	12.50	7.23
8	66.67	38.47	22.23	33.34	19.27	28.88	16.67	9.64	13.34	7.71
9	75.00	43.27	25.01	37.50	21.68	32.49	18.75	10.84	15.00	8.67
10	83.34	48.08	27.79	41.67	24.09	36.11	20.84	12.05	16.67	9.64
12	100.00	57.70	33.25	50.00	28.90	43.33	25.00	14.45	20.00	11.56
14	116.67	67.31	38.91	58.33	33.72	50.54	29.17	16.86	23.33	13.49
15	125.00	72.12	41.69	62.50	36.13	54.16	31.25	18.06	25.00	14.45
18	150.00	86.54	50.02	75.00	43.35	64.99	37.50	21.68	30.00	17.34
20	166.67	96.16	55.58	83.34	48.17	72.21	41.67	24.09	33.34	19.27
24	200.00	115.39	66.69	100.00	57.80	86.65	50.00	28.90	40.00	23.12
25	208.34	120.20	69.48	104.17	60.21	90.26	52.09	30.11	41.67	24.09
30	250.00	144.23	83.37	125.00	72.25	108.31	62.50	36.13	50.00	28.90
35	291.67	168.27	97.27	145.84	84.30	126.36	72.92	42.15	58.34	33.72
40	333.34	192.31	111.16	166.67	96.34	144.41	83.34	48.17	66.67	38.54
45	375.00	216.35	125.06	187.50	108.38	162.46	93.75	54.19	75.00	43.35
50	416.67	240.39	138.95	208.34	120.43	180.51	104.17	60.21	83.34	48.17
55	458.34	264.43	152.85	229.17	132.47	198.56	114.59	66.24	91.67	52.99
60	500.00	288.47	166.75	250.00	144.51	216.61	125.00	72.25	100.00	57.80
66	550.00	317.31	183.20	275.00	158.77	238.68	137.50	79.39	110.00	63.51
(1) Single Pha										

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Heater Care And Information

Taking Care Of Your Heating System

At the start of each heating season clean and inspect each heater. It is extremely important to remember to turn off the power at the circuit breaker before attempting any installation, maintenance or repairs. Failure to do so may result in serious electrical shock, burns or possible death. Remove the grille on fan heaters. Clean any dust or lint from inside the heater with a vacuum cleaner, compressed air or soft bristle brush. Check that the fan spins freely. Between 5-10 years you may want to upgrade your thermostat, as the sensing element may not be as accurate as when new. The most ac- curate thermostat is listed as an anticipated model. If, in the future, you decide to remodel or add rooms to your home, you won't have to worry about the size of your heating system. With electric heat you can add to the heating system, in large or small increments.

Zone Control

Thermostat settings are a matter of personal preference. A few days of adjustments will help you determine the setting that is comfortable for you. Most people keep their living quarters at 68 to 72°F (20 to 22°C) and sleeping areas at 65°F (18°C). For energy conservation and financial savings it is wise to set living area thermostats back at night, but not below 60°F (16°C).

Temperature Versus Cost

When setting your thermostat, you may want to consider the relative cost of various temperatures. The chart at right shows how much higher your heating bill may be if you like temperatures warmer than 70°F (21°C).

	-3.1%	+3.1%	+6.2%	+9.4%	+12.5%	+15.6%	+18.7%	+21.9%	+25.0%	+28.0%	+31.0%
69°F	70°F	71°F	72°F	73°F	74°F	75°F	76°F	77°F	78°F	79°F	80°F
20.5°C	21.1°F	21.6°C	22.2°C	22.7°C	23.3°C	23.8°C	24.4°C	25°C	25.5°C	26.1°C	26.6°C

Ohm's Law

The relationship between Wattage (heat) output and the applied Voltage of electric resistance heating elements is determined by a precise physical rule defined as Ohm's Law which states that the current in a resistance heating element is directly proportional to the applied Voltage. Ohm's Law is traditionally expressed as:

I = E/R

Where: I = Amperes (Current)

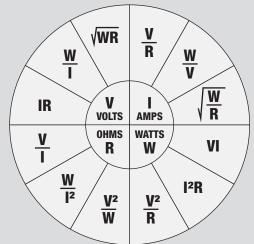
- **E** = Voltage
- *R* = Ohms (Resistance)

The same equation using the conventional abbreviation for voltage is: I = V/R

Where: I = Amperes (Current)

✓ = Voltage

 $\mathbf{R} = \text{Ohms}$ (Resistance)



An unknown electrical value can be derived by using any two known values in one of the variations of Ohm's Law.



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.

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 capacility.



2015: King launches EC02S 2-Stage Heaters – EC02S 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.







