

Electronic Unit Heater KB Platinum Series



Model Code:

| | | | | | |
|----|----|----|----|----|-----|
| KB | 48 | 10 | -1 | -P | -FB |
| A | B | C | D | E | F |

A: Series
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: -P = Platinum Controller
F: FB = Fuse Block



- Electronic temperature controller
- Large LED display
- Remote control included
- Fan only & timer modes
- Fan delay
- Patented Smart Limit Protection®
- Adjustable louvers
- Unit bearing motor
- Spiral finned heat elements
- Standard color: textured gray
- Universal mounting bracket included
- 5-year limited warranty



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 ECO2S 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.

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 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)

Electronic Unit Heater KB Platinum Series

Ordering Information - single phase

| MODEL | UPC | KW | BTUH | PHASE | VOLTS | AMPS | MOTOR HP | CFM | TEMP. RISE | AIR THROW | MAX. MOUNT HEIGHT | *SIZE | WT. (lbs.) |
|----------------|-------|------|-------|-------|----------|-----------------------|------------|------|------------|-----------|-------------------|-------|------------|
| KB2003-1-P | 13312 | 3 | 10.2 | 1 | 208 | 14.4 | 9W | 400 | 37° | 15ft. | 8ft. | A | 30.5 |
| KB2403-1-P | 13313 | 3 | 10.2 | 1 | 240/208* | 12.5 | 9W | 400 | 37° | 15ft. | 8ft. | A | 30.5 |
| KB2703-1-P | 13314 | 3 | 10.2 | 1 | 277 | 10.8 | 9W | 400 | 38° | 15ft. | 8ft. | A | 30.5 |
| KB2004-1-P | 13315 | 4 | 13.5 | 1 | 208 | 19.2 | 9W | 400 | 38° | 15ft. | 8ft. | A | 30.5 |
| KB2404-1-P | 13316 | 4 | 13.5 | 1 | 240/208* | 16.7/14.4 | 9W | 400 | 38° | 15ft. | 8ft. | A | 30.5 |
| KB2704-1-P | 13317 | 4 | 13.5 | 1 | 277 | 14.4 | 9W | 400 | 38° | 15ft. | 8ft. | A | 30.5 |
| KB2005-1-P | 13323 | 5 | 17 | 1 | 208 | 24.0 | 9W | 400 | 40° | 16ft. | 8ft. | A | 30.5 |
| KB2405-1-P | 13324 | 5 | 17 | 1 | 240/208* | 20.8/18 | 9W | 400 | 40° | 16ft. | 8ft. | A | 30.5 |
| KB2705-1-P | 13325 | 5 | 17 | 1 | 277 | 18.1 | 9W | 400 | 40° | 16ft. | 8ft. | A | 30.5 |
| KB2007-1-P | 13326 | 7.5 | 25.6 | 1 | 208 | 36.1 | 16W | 600 | 40° | 20ft. | 9ft. | B | 45.0 |
| KB2407-1-P | 13327 | 7.5 | 25.6 | 1 | 240/208* | 31.3/27 | 16W | 600 | 40° | 20ft. | 9ft. | B | 45.0 |
| KB2707-1-P | 13328 | 7.5 | 25.6 | 1 | 277 | 27.1 | 16W | 600 | 40° | 20ft. | 9ft. | B | 45.0 |
| KB2010-1-P | 13329 | 9.98 | 34.1 | 1 | 208 | 48.0 | 25W | 725 | 44° | 24ft. | 10ft. | B | 45.0 |
| KB2410-1-P | 13330 | 10 | 34.1 | 1 | 240/208* | 41.6/36.1 | 25W | 725 | 44° | 24ft. | 10ft. | B | 45.0 |
| KB2710-1-P | 13331 | 10 | 34.1 | 1 | 277 | 36.1 | 25W | 725 | 44° | 24ft. | 10ft. | B | 45.0 |
| KB2012-1-P-FB | 13404 | 12.5 | 42.7 | 1 | 208 | 60.1 | 25W | 825 | 48° | 30ft. | 11ft. | C | 50.0 |
| KB2412-1-P-FB | 13405 | 12.5 | 42.7 | 1 | 240/208* | 52.1/45.1 | 35W | 825 | 48° | 30ft. | 11ft. | C | 50.0 |
| KB2015-1-P-FB | 13406 | 15 | 51.2 | 1 | 208 | 72.1 | 50W | 925 | 51° | 33ft. | 12ft. | C | 50.0 |
| KB2415-1-P-FB | 13407 | 15 | 51.2 | 1 | 240/208* | 62.5/54.1 | 50W | 925 | 51° | 33ft. | 12ft. | C | 50.0 |
| KB2003-3MP-P | 13332 | 3 | 10.2 | 1-3 | 208 | 14.4/8.3 | 9W | 400 | 37° | 14ft. | 8ft. | C | 45.0 |
| KB2010-3MP-P | 13343 | 9.98 | 47.9 | 3 | 208 | 27.7 | 25W | 825 | 48° | 30ft. | 11ft. | C | 46.5 |
| KB2403-3MP-P | 13333 | 3 | 10.2 | 1-3 | 240/208* | 62.5/54.1 | 9W | 400 | 37° | 14ft. | 8ft. | C | 45.0 |
| KB4803-3MP-P | 13348 | 3 | 10.2 | 1-3 | 480 | 6.3/3.6 | 9W | 400 | 37° | 14ft. | 8ft. | C | 45.0 |
| KB2005-3MP-P | 13334 | 5 | 17.1 | 1-3 | 208 | 24 & 13.9 | 9W | 400 | 40° | 16ft. | 8ft. | C | 45.0 |
| KB2405-3MP-P | 13335 | 5 | 17.1 | 1-3 | 240/208* | 20.8/18 & 18/15.6 | 9W | 400 | 40° | 16ft. | 8ft. | C | 45.0 |
| KB4805-3MP-P | 13349 | 5 | 17.1 | 1-3 | 480 | 10.4 & 6.0 | 9W | 400 | 40° | 16ft. | 8ft. | C | 45.0 |
| KB2007-3MP-P | 13336 | 7.5 | 25.6 | 1-3 | 208 | 36.1 & 20.8 | 16W | 600 | 40° | 20ft. | 9ft. | C | 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. | C | 46.5 |
| KB4807-3MP-P | 13350 | 7.5 | 25.6 | 1-3 | 480 | 15.6/9 | 16W | 925 | 51° | 33ft. | 12ft. | C | 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. | C | 46.5 |
| KB4810-3MP-P | 13351 | 10 | 34.1 | 1-3 | 480 | 20.8 & 12 | 25W | 725 | 44° | 24ft. | 10ft. | C | 46.5 |
| KB4812-3MP-P | 13401 | 12.5 | 42.7 | 1-3 | 480 | 26 & 15 | 25W | 825 | 48° | 30ft. | 11ft. | C | 46.5 |
| KB4815-3MP-P | 13402 | 15 | 51.2 | 1-3 | 480 | 31.3 & 18.1 | 50W | 925 | 51° | 33ft. | 12ft. | C | 46.5 |
| KB2012-3-P | 13344 | 12.5 | 42.7 | 3 | 208 | 34.7 | 35W | 825 | 48° | 30ft. | 11ft. | C | 50.0 |
| KB2412-3-P | 13345 | 12.5 | 42.7 | 3 | 240/208* | 30.1/26 | 35W | 825 | 48° | 30ft. | 11ft. | C | 50.0 |
| KB2015-3-P | 13346 | 15 | 51.2 | 3 | 208 | 41.7 | 50W | 925 | 51° | 33ft. | 12ft. | C | 50.0 |
| KB2415-3-P | 13347 | 15 | 51.2 | 3 | 240/208* | 36.1/31.2 | 50W | 925 | 51° | 33ft. | 12ft. | C | 50.0 |
| KB2020-3-P-FB | 13408 | 20 | 68.3 | 3 | 208 | 55.6 | 1/4 HP | 1100 | 57° | 47ft. | 13ft. | E | 55.0 |
| KB2420-3-P-FB | 13409 | 20 | 68.3 | 3 | 240/208* | 48.2/41.6 | 1/4 HP | 1100 | 57° | 47ft. | 13ft. | E | 55.0 |
| KB4820-3-P | 13416 | 20 | 68.3 | 3 | 480 | 24.1 | 1/4 HP | 1100 | 57° | 47ft. | 13ft. | E | 55.0 |
| *KB2025-3-P-FB | 13417 | 25 | 85.3 | 3 | 208 | 69.5 | (2) 35W | 1100 | 57° | 47ft. | 13ft. | F | 60.5 |
| *KB2425-3-P-FB | 13418 | 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 | 13419 | 30 | 102.4 | 3 | 208 | 83.4 | (2) 50W | 1800 | 53° | 48ft. | 15ft. | F | 60.5 |
| *KB2430-3-P-FB | 13420 | 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 | 13438 | 40 | 136.5 | 3 | 240 | 96.3/83.3 | (2) 1/4 HP | 2200 | 57° | 53ft. | 15ft. | F | 60.5 |
| *KB4840-3-P-FB | 13441 | 40 | 136.5 | 3 | 480 | 48.2 | (2) 1/4 HP | 2200 | 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.

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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

| BRACKET # | HEATER KW SIZE USED WITH | BRACKET DIMENSIONS | | | | | | | | | | | |
|-----------|--|----------------------------------|-----------------------------------|-----------------------------------|----------------------------------|-----|---------------------------------|---------------------------------|----------------------------------|---------------------------------|-----------------------------------|----|-----|
| | | L | W | H | A | B | C | D | E | F | X | Y | Z |
| KBB-1 | 3 to 5 kW (1 phase) | 12½" | 2 ¹⁵ / ₁₆ " | 10 ¹ / ₁₆ " | 1 ³ / ₁₆ " | 7" | 1 ⁷ / ₈ " | 1 ⁷ / ₈ " | 9¼" | 1 ⁷ / ₈ " | ¾" | 1" | ½" |
| KBB-2 | 7.5 to 10 kW (1 phase) 3 to 20 kW (3 phase) | 16 ⁷ / ₈ " | 2 ¹⁵ / ₁₆ " | 10 ¹ / ₈ " | 1¼" | 7" | 1 ⁷ / ₈ " | 1 ⁵ / ₈ " | 13 ⁵ / ₈ " | 1 ⁵ / ₈ " | ¾" | 1" | 1½" |
| KBB-3 | 25 to 40 kW (3 phase) | 19½" | 4 ³ / ₁₆ " | 13 ³ / ₁₆ " | 1 ⁵ / ₁₆ " | 10" | 1 ⁷ / ₈ " | 1 ⁵ / ₈ " | 16¼" | 1 ¹ / ₈ " | 11 ¹ / ₁₆ " | 1" | 2" |

Dimensional Data

Twin Unit Size F & G

| HEATER SIZE | HEIGHT | DEPTH | WIDTH |
|-------------|--------|-------|-------|
| A | 16.5" | 11" | 15" |
| B | 16.5" | 13.5" | 15" |
| C | 16.5" | 18" | 15" |
| E | 20.5" | 18" | 15" |
| F | 18.5" | 18" | 30" |
| G | 20.5" | 18" | 30" |

KBB-1, KBB-2 & KBB-3
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. Refer to bracket selection chart.