

SECTION 23 83 33

ELECTRIC RADIANT HEATERS PLATINUM MARINE

| Product | Product Code (US/CA) | Wattage | Heat Area | Current |
|------------------------|----------------------|---------|--------------------|----------------|
| Platinum 2300W - Black | BH0320015 | 2300 | 65ft ² | 220-240V/9.6A |
| Platinum 2300W - Black | BH0320023 | 2300 | 65ft ² | 208V/11.1A* |
| Platinum 2300W - White | BH0320017 | 2300 | 65ft ² | 220-240V/9.6A |
| Platinum 2300W - White | BH0320024 | 2300 | 65ft ² | 208V/11.1A* |
| Platinum 3400W - Black | BH0320016 | 3400 | 108ft² | 220-240V/14.2A |
| Platinum 3400W - Black | BH0320018 | 3400 | 108ft² | 208V/16.3A* |
| Platinum 3400W - White | BH0320025 | 3400 | 108ft² | 220-240V/14.2A |
| Platinum 3400W - White | BH0320026 | 3400 | 108ft² | 208V/16.3A* |
| Platinum 4500W - Black | BH3622002 | 4500 | 143ft ² | 220-240V/18.8A |
| Platinum 4500W - Black | BH3622006 | 4500 | 143ft ² | 208V/21.6A* |
| Platinum 4500W - White | BH3622003 | 4500 | 143ft ² | 220-240V/18.8A |
| Platinum 4500W - White | BH3622007 | 4500 | 143ft² | 208V/21.6A* |

PART 1 GENERAL

1.1 SUBMITTALS

A. Action Submittals:

1. Product Data: Manufacturer's descriptive data and product attributes including heat output and heat distribution area, control components and connections, mounting hardware, and installation instructions.

B. Closeout Submittals:

- 1. Operation and Maintenance Data.
- 2. Hand remote control units to the Owner at Substantial Performance of the work.

1.2 QUALITY ASSURANCE

- A. Regulatory Requirements: Radiant heaters and installation are to be in accordance with requirements of:
 - a. UL 2021 Fixed and Location-Dedicated Electric Room Heaters
 - b. NFPA 70, National Electrical Code
 - c. ANSI/IEC 60529, Degrees of Protection by Enclosures (IP Code)
 - d. State or Municipal requirements

1.3 WARRANTY

A. Manufacturer's standard warranty against parts failure for durations as specified with the heaters.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Contract documents are based on Bromic Heating www.bromic.com
- B. Substitutions: Not permitted.

2.2 INDOOR/OUTDOOR WALL OR CEILING MOUNTING RADIANT HEATERS AND CONTROLS

- A. Heater: Bromic "PLATINUM SMART-HEAT MARINE" Series, ANSI/IEC 60529 IP55 rated, 208 or 220-240 VAC, 4500 watt, 3400 watt or 2300 watt output, matte black or white weatherproof heaters equipped with:
 - 1. A type 316 brushed stainless steel sealed heater head enclosure with tinted glass ceramic screen
 - 2. Wall or Ceiling Mount: Included 8.5" mounting bracket.
 - 3. Ceiling Mount Suspension: Double coated steel 4-foot straight ceiling mount pole or 2-foot straight ceiling mount pole with mounting bracket.
 - 4. Recess/Flush Mount: Ceiling recess kit or Low clearance recess kit, stainless steel, ventilated insulated enclosure (Low clearance not suitable for 4500W) with mounting bracket.
 - 5. A 5-year parts warranty for land use only. 1-year parts for vessel use.

B. Control Components:

- 1. "On/Off Controller" 110/208/230 VAC wireless controllers remote supplied loose, each capable of wireless ON/OFF control within a 100-foot range.
- 2. "Dimmer Controller" 208/230 VAC wireless controllers remote supplied loose, each capable of wireless dimming control within a 100-foot range.

PART 3 EXECUTION

3.1 INSTALLATION OF RADIANT HEATERS

- A. Supply electric radiant heaters where shown. Supply wireless controllers where indicated. Hand the components to the electrical trade at the locations where they are to be installed for installation as part of the electrical work. Confirm exact locations prior to installation.
- B. Ensure that installation personnel have copies of the heater manufacturer's published installation instructions, including required clearances.
- C. Adjust heater angles to the Owner's requirements. Ensure that all heaters are protected from the elements.
- D. Test and confirm proper operation of all control components.

3.2 START-UP

A. After heater and control installation is complete, start each heater and test and confirm proper operation of all phases of heater operation.

3.3 COMMISSIONING

A. Commission the heaters in accordance with specified commissioning requirements.

3.4 DEMONSTRATION AND TRAINING

A. Include training for 2 hours of on-site operation and maintenance demonstration and training for 2 groups of 4 people.

END OF SECTION