

PLATINUM SMART-HEAT<sup>™</sup> ELECTRIC HEATER SERIES II (MARINE-LR IP56) BY BROMIC

## INSTALLATION, INSTRUCTION AND SERVICE MANUAL

FOR MODEL 2300W / 3400W





#### **Original Instructions**



READ THIS MANUAL CAREFULLY. SEE INSIDE COVER FOR IMPORTANT INFORMATION ABOUT THIS MANUAL. KEEP INSTRUCTION WITH APPLIANCE FOR FUTURE REFERENCE.

Version 2.3 US

## \Lambda IMPORTANT

This manual contains important information about the installation, operation, and maintenance of Platinum Smart-Heat<sup>™</sup> Electric Heaters. Please pay close attention to the important safety information shown throughout this instruction manual. Any safety information will be accompanied by the following safety alert symbols:

 $\triangle$  danger,  $\triangle$  warning,  $\triangle$  important

- READ THIS MANUAL CAREFULLY before installing or servicing this product.
- Improper installation, operation, or maintenance can result in death, severe injury, or property damage.
- This appliance is intended for fixed installation with 220-240V AC single-phase power supply.
- Installation MUST be carried out by a licensed and authorised technician in accordance with local electrical codes and relevant marine regulation and rules.
- <u>This Lloyd's Register heater shall be installed as ceiling</u> recess fixed mount ONLY.
- <u>Due to vessel movement, the heater must be fixed to vessel</u> <u>structure</u>
- Australian Registered Design 366537. International Registered Designs Pending.



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### IMPORTANT NOTES AND WARNINGS

#### 

- IMPORTANT Installation MUST be carried out by a licensed and authorised person.
- DO NOT leave heaters ON unattended for prolong use and inspect the heating space regularly.
- Improper installation, adjustment, or alteration and failure to follow the warnings and instructions in this manual could result in severe personal injury, death or property damage.
- The manufacturer is not responsible for any damage that could happen from improper use. The manufacturer emphasises that this appliance should be used in a responsible manner and that all procedures, warnings, and safety instructions contained in this booklet should be followed strictly.
- The installer is to ensure that the requirements of the local authority, local electrical installation code, municipal building codes, marine code, and any other relevant statutory regulations are carried out.
- Do not place articles on or against this appliance.
- To reduce the risk of fire, do not store or use gasoline or other flammable vapours and liquids in the vicinity of the heater.
- This Installation, Operation and Service manual should not be removed from the site of installation. Installer should leave manual with the customer for future reference.
- A minimum safety distance of 1000mm (39.4") should always be left in front of the appliance.
- The appliance must not be located directly below or in front of an electrical socket. Heat radiated from the appliance may damage the electricity outlet or plug if placed incorrectly.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance
   by a person responsible for their safety.
- Heaters shall NOT be installed in wardrobes or enclosed closets.
- Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns, clothing ignition, or other serious personal injury
- This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, etc. and curtains at least 3 feet (1m) from the front of the heater and keep them away from the sides and rear
- Keep packaging materials out of reach of children
- Do not spray aerosols or flammable materials in the vicinity of this appliance while it is in operation
- Installation and repair must be carried out by a qualified & licenced service person only. The heater should be inspected before use and at least annually serviced & inspected by a qualified & licenced service person.
- Do not perform maintenance until heater has been turned off, power disconnected, and heater temperature has cooled to room temperature.
- Certain materials or items, when stored under or near the appliance, will be subjected to radiant heat and could be seriously damaged. Combustible materials eg. walls, floors, furniture, fixtures and plants must be kept a minimum of 1000mm (3 ft) from the heater. Regularly inspect the heating space for any materials or items that should not be near the heater.
- Clothing or other flammable materials should not be hung from the heater or placed on or near the heater.

- Be sure the heater is not facing the ceiling or flammable or combustible substances/materials.
- This radiant heater shall NOT be installed on recreational vehicles.
- Do not attempt to alter the unit in any manner.
- This heater may be installed on suitably sized marine craft. When such a marine installation is completed it is the sole responsibility of the consumer, designer and marine installer to ensure the application of the heater and installation complies with all relevant electrical, fire and marine safety codes. Bromic accepts no responsibility for the compliance, safety and suitability of any such installation.
- Remove transit protection before use.
- Never operate the heater in an explosive environment such as areas where petrol or other flammable liquids or vapours are stored.
- Do not paint any surface of the heater.
- Check for damage to the appliance regularly. The heater must not be used if the glass panel or any other part of the heater is damaged. If damage to the appliance is suspected, discontinue use immediately and contact the supplier or qualified person to repair.
- After unpacking, make sure the appliance shows no signs of visible damage or tampering. If the appliance appears damaged, contact the place of purchase for assistance.
- This appliance must only be used on a 220-240V AC Single phase power supply.
- Do not touch the heating glass surface at any time, even when the heater is turned off and has cooled down.
- Do not touch the heater with wet hands at any time.
- If the appliance has not been used, or will not be used, for a long period of time, disconnect power supply
- At the end of this product's useful life, it must not be disposed of as domestic waste, but must be taken to a collection centre for waste electrical and electronic equipment. It is the user's responsibility to dispose of this appliance through the appropriate channels at the end of its useful life. Failure to do so may incur the penalties established by laws governing waste disposal. Proper differential collection, and the subsequent recycling, processing and environmentally compatible disposal of waste equipment avoids unnecessary damage to the environment and possible related health risks, and also promotes recycling of the materials used in the appliance. For further information on waste collection and disposal, contact your local waste disposal service, or the place of purchase.
- In case of direct connection to a supply line, for each platinum Smart-Heat Electric heater, a two poles or double pole residual current device (RCD), or residual circuit breaker (RCCB), must be fitted upstream from the supply line; this electric wiring is designed to quickly and automatically disconnect the appliance when it detects that the electric current is not balanced between the supply and return conductors to prevent electric shock.
- In case of direct connection to a supply line, for each Platinum Smart Heat Electric heater, a bipolar circuit breaker (CB) with contact opening distance of at least 3mm must be fitted upstream from the supply line to protect from damage caused by excess current from an overload or short circuit.
- Contact an authorized service technician if you are unsure if you have RCD and CB installed on the premises.
- Do not install the heater directly near a bathtub, shower or swimming pool. Any switches or controls must not be within reach of a person in the bathtub, shower or swimming pool.
- To maintain Ingress Protection Rating (IP56), only IP56 rated, electrical components such as, switches and conduit fittings must be used for electrical installation.
- This product does not have a switch for electrical disconnection.

### IMPORTANT NOTES AND WARNINGS CONTINUED ...

A means for disconnection of the heater must be incorporated in the fixed wiring according to the local electrical codes.

- This heater is not equipped with a device to control the room temperature. Do not use this heater in small rooms when they are occupied by persons not capable of leaving the room on their own, unless constant supervision is provided.
- Fire Sprinklers must be located at an appropriate distance from each heater to avoid accidental activation of the sprinkler. Ethylene glycol or propylene glycol must never be used in fire sprinkler systems where heaters are present as these substances maybe become flammable when heated. A fire sprinkler professional must be consulted when heaters are installed where fire sprinklers are present to ensure that heaters and the fire sprinkler system are properly integrated.
- It is a recommended to call at least once a year the service company to check the general status, the heating functions and the integrity of linked safety devices (RCD and CB).
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.
- Do not bend the electrical connection to the power supply.

- Keep the cable away from sharp edges during handling and installation.
- Do not pull on the cable or subject it to traction force.
- Avoid physical shock & impact to the heater when handling and after installation.
- Do not apply any pressure on the glass surface.
- Never use steam cleaners for cleaning of the appliance. Never hit the glass. As potential electric shock.
- Keep the electrical connection area to the power supply clean.
- Ensure that the heating unit is not directly exposed to rain or water contact.
- Do not install or use the heater in any way other that indicated in the instruction leaflet.
- Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- If any part of the instruction manual is missing or damaged, contact Bromic for a complete version.
- If you are unsure of any aspect of the installation, contact Bromic for advice.

#### PRODUCT OVERVIEW

The Platinum Smart-Heat<sup>™</sup> Electric is designed to provide efficient spot heating for marine applications.

The heaters are built with corrosion resistant materials, have electrical approval, and are rated to IP56 water Ingress Protection. Making the Platinum Smart-Heat™ Electric the perfect solution for a variety of indoor and outdoor heating applications.

#### SPECIFICATIONS

SF Lein Textholds					
Model		2300W	3400W		
Part no.	Black	BH3130040	BH3130042		
	White	BH3130041	BH3130043		
Heat Output (Watts)		2300W	3400W		
Power connection required (Volts/Amps)		220-240V - A.C. - 50/60Hz - 9.6A	220-240V - A.C 50/60Hz - 14.2A		
Dimensions (WxHxDmm)		840 x 182 x 54 mm (33.0 x 7.0 x 2.0")	1275 x 182 x 54 mm (50.2 x 7.0 x 2.0")		
Weight (kg)		7.5kg (16.5lbs)	10kg (22lbs)		
Finish		Brushed Stainless Steel 316			
Approval		Intertek: 5001799 / Lloyd's Register: LR2160441TA			

#### **PRODUCT FEATURES**

- Ultra-thin and stylish design
- Efficient directional spot heating
- Heat Zones one or more heaters can be switched on and off simultaneously from a single remotelocated switch
- Platinum Smart-Heat<sup>™</sup> Electric Heaters can also be integrated into smart control systems
- Ceiling Recess Kit (to be purchased separately):
  - > 2300W model ceiling recess BH3130044
  - > 3400W model ceiling recess BH3130045
- Wind resistant & IP56 water protection rating

### HEATING INSTALLATION INSTRUCTIONS

#### CEILING RECESS KIT INSTALLATION (SOLD SEPARATELY) FOR INFORMATION ONLY

- Heaters must be installed according to the minimum installation clearances shown in these diagrams.
  - Due to vessel movement, the heater must be fixed to vessel structure

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Individual clearances to combustibles are fixed minimums to each individual option and cannot be combined between Option 1 and Option 2

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Instructions below are suitable for ceiling surfaces 10-30mm (0.4-1.2") thick. For ceiling surfaces thicker than 30mm (1.2"), contact Bromic for alternative installation options.

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The heater shall, under no circumstance, be covered with insulating material or similar material.

#### **CLEARANCE TO COMBUSTIBLES OPTION 1**

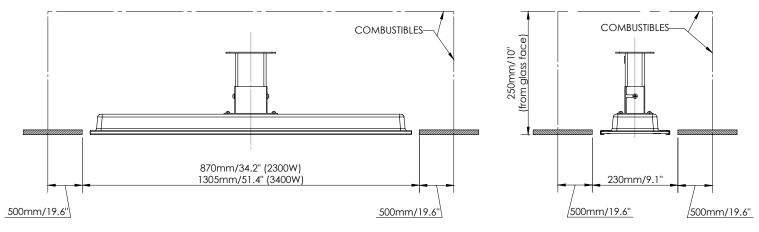
The stated clearance to combustible materials represents surface temperatures of 149°F above room temperature. Building material with a low heat tolerance (such as plastic, vinyl siding, canvas, tri-ply ect.) may be subject to degradation at lower temperature. It is the installer's responsibility to assure that adjacent materials are protected.

## ▲ WARNING

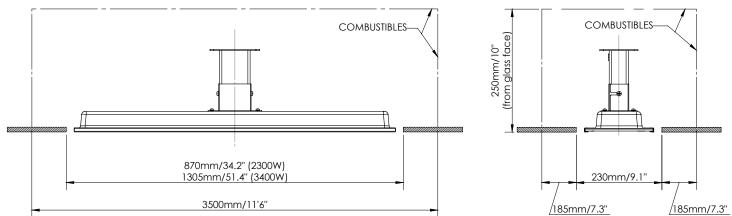
In ceiling recess installation, the heater must be completely protected against water contact from above.

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Joists, beams and rafters shall not be cut or notched to install the heater.



#### **CLEARANCE TO COMBUSTIBLES OPTION 2**



Prior to heater installation, ensure the clearance within the ceiling cavity meets either option 1 or option 2 above. The clearance height to combustibles for both option are same hence clearance option can be selected based on the allowable ceiling cavity (width and length).

#### bromic.com/heat

## HEATING INSTALLATION INSTRUCTIONS

#### 🕂 WARNING - Outdoor Installation

This heater MUST be permanently installed by an authorised/licenced person. Do not perform maintenance, or carry out installation or assembly procedure while electrical power is switched on. Wait 2 hours after switching off the heater before handling.

## MARNING - Outdoor Installation

It is important that regular maintenance is carried out on the heater to maintain appearance. INSPECT AND CLEAN AT LEAST EVERY MONTH FOR THE BODY AND STRUCTURE. INSPECT AND CLEAN MORE FREQUENTLY IN ADVERSE CONDITIONS SUCH AS COASTAL ENVIRONMENT OR MARINE CRAFT.

In a salt-air environment, such as near an ocean, corrosion occurs more quickly than normal. Stainless 316 has been used in the Marine configuration. Remove salt spray from the heater immediately to prolong heater life. Use a qualified technician to check monthly for corroded areas and remove from service when heater safety is compromised.

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MINIMUM DISTANCE BETWEEN HEATERS MEASURED FROM EDGE OF HEATER MUST BE AT LEAST 500mm (20")

Note: Additional clearance maybe be required for glass, painted surfaces or other materials which may be damaged by radiant or convection heat. It is the installers responsibility to ensure that adjacent materials are not subject to degradation.

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Space heaters should be properly located far-away from any device activated by heat, including but not limited to heat detectors, sprinklers and spray heads in order to avoid their unintentional activation.

### HEATING INSTALLATION INSTRUCTIONS

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BEFORE COMMENCING THE INSTALLATION, PLEASE ENSURE THE BRACKET'S FOAM MATCHES AS PER IMAGE 1.

ALL COMPONENTS IN THE BRACKET ASSEMBLY MUST BE USED. THIS PRODUCT IS SPECIFICALLY SUITED FOR CRUISE SHIP INSTALLTION ACCORDING TO INSTRUCTIONS BELOW. NOTE: BRACKET MUST BE FIXED TO VESSEL STRUCTURE.

1. Prepare ceiling cut-out with dimensions from images on P.7 to fit ceiling recess frame **(a)**. Heater must be installed with heater surface at least 2400mm (94") above the floor level, with 500mm (20") clearance to the nearest wall on all sides of the heater. Minimum distances to combustibles within cavity must be according to **only one** of the two options shown.

2. From below, bring ceiling frame up and into ceiling cutout. Fasten ceiling frame into cut-out at both ends and centre using appropriate screws **(b)**. Which locator hole to use is dictated by the thickness of the ceiling surface. The fastening screws must be inserted into a strong material that can easily support the weight of ceiling recess. Your installation may require reenforcing before the frame can be safely installed.

3. Unscrew and remove plug-in wall bracket. Attach extra supplied cable gland into the same hole from the outside of the bracket. Fasten in place with metal cable gland nut from inside the bracket **(c)**.

4. Feed heater power cable through cable gland from inside of wall bracket **(d)**.

5. Ensure M6x14mm screws are inserted into either side of heater bracket with 6mm (0.3") of the threaded shaft exposed under the screw head. **(e)**.

6. Insert heater bracket into mounting bracket by hooking M6 screws into place in mounting slots **(f)**.

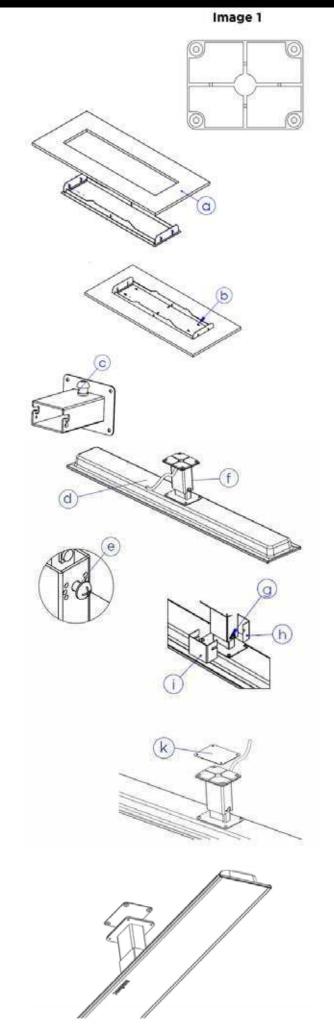
7. Fix heater to bracket in straight position using M4x10mm positioning screws on either side of mounting bracket **(g)**. Ensure M6 screws are sitting fully in the mounting slots (as if the heater were hanging from the wall bracket).

8. Fit the smaller, straight cover over the heater bracket so that the slots pass over the shafts of the M6x14mm mounting screws **(h)**. Apply thread locker on M6 screws and washer. (recommendation Loxeal 86-72). Fit the larger cover over the smaller cover in the same way from the opposite side of the bracket **(i)**.

9. Tighten mounting screws firmly, ensuring covers fit snugly against the bracket on all sides (j) and (h).

10. Firmly tighten cable gland in wall bracket so that cable does not move when pulled.

11. Mounting heater onto the vessel's structure. Ensure IP cover **(k)** are installed too. The IP cover must be installed to protect heater from water ingress. Without this cover, heater is operating in an unsafe condition which could lead to heater failure. Warranty will be voided if this is not installed.



## ELECTRICAL INSTALLATION

### 🚹 WARNING

This heater MUST be permanently installed by an authorised/licenced person. Do not perform maintenance, or carry out installation or assembly procedure while electrical power is switched on. To disconnect heater, turn off power to heater circuit at main disconnect panel.

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ELECTRICAL SHOCK HAZARD! Serious injury or death may occur. Disconnect from electrical supply before installing or servicing this heater. Read and follow installation clearance requirements outlined in this manual. The appliance MUST be connected to a properly grounded electrical source.

#### **ELECTRICAL INSTALLATION**

- Check product label for correct voltage and wattage to ensure sure power source conforms to the heaters requirements.
- 2. The power cable must positioned away from & protected from the enclosure of the heater.
- 3. Make all connections in accordance with local and marine electrical code regulations. For outdoor installation, all connections must be made in accordance with local and marine electrical code regulations for outdoor wiring. Only use wiring components approved for outdoor and suitable for marine application use with minimum IPX6 rating.

### SERVICING

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ELECTRICAL SHOCK HAZARD! Serious injury or death may occur. Disconnect from electrical supply before servicing this heater.

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Servicing and maitenance MUST be carried out by an authorised and licenced service person only. Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.

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If the supply cord is damaged, it must be replaced by Bromic, a service agent of Bromic or similarly qualified persons in order to avoid a hazard. Contact Bromic for further information on replacement of the supply cord.

### MAINTENANCE

For longest produt life, and to maintain product appearance, mount heater under cover and protect from rain and weather wheneve possible.

The exterior housing of the heater should be cleaned regularly. To clean the appliance; ensure heater is off, and has been off for at least 2 hours after operation, before wiping off any dirt/dust with a soft damp cloth.

Salt in the air can cause rusting of metal, especially in marine environment. Additional cleaning of the heater with a soft damp cloth fortnightly will aid in maintaining the product's appearance.

SYMPTOM	POSSIBLE CAUSE (S)	CORRECTIVE ACTION
No heat	1. Improper connection	1. Check connection to power supply
Not enough heat	<ol> <li>Heater too small for application</li> <li>Heater mounted too high or too far</li> </ol>	<ol> <li>Add additional heater(s)</li> <li>Decrease mounting height or distance</li> </ol>
Too much heat	1. Heater too large for application 2. Heater mount too low or too close	<ol> <li>Replace with smaller heater</li> <li>Increase mounting height or distance</li> </ol>

## TROUBLESHOOTING

## **POST-INSTALLATION REPORT**

POST-INSTALLATION REPORT FOR PLATINUM SMART-HEAT ELECTRIC RADIANT HEATERS AFTER HEATER INSTALLATION PLEASE PHOTOCOPY, COMPLETE, & SEND THIS REPORT							
BY: FAX TO (02) 9748 4289 or BY MAIL TO Bromic Heating Pty Ltd, 10 Phiney Place, Ingleburn NSW 2565 Australia or SCAN AND EMAIL TO info@bromic.com							
Customer Business Name:							
	Please fill in the relevant information or ci appropriate Yes/No responses below:	Please fill in the relevant information or circle the appropriate Yes/No responses below:					
Date: dd / mm / yyyy	How many Platinum Smart-Heat heaters are installed on this site?	2300 kW	3400 kW				
Site Address:	ls/are heater(s) ceiling recessed?	Yes	No				
Suburb:	Do <u>ceiling recessed</u> heater clearances match the minimum requirements outlined in the " Ceiling Recess" section of the Installation, Operation and Service Manual?	Yes	No				
State: Postcode: Customer Contact Details:	Do heater clearances match the minimum requirements outlined in the "Installation Requirements" section of the Installation, Operation and Service Manual?	Yes	No				
Name:	Is the power supply line adequately sized for the number of heaters installed?	Yes	No				
Position: Ph:( ) Fax:( )	Do heater(s) installed in-accordance to Installation, Operation and Service Manual?	Yes	No				
Mobile:	Was the heater field tested and operated without malfunction?	Yes	No				
Installer Contact Details:	Is the circuit equipped with residual protector device (RCD)?	Yes	No				
Name:	Does the heater(s') installation location pose a hazard to the site?	Yes	No				
Position: Ph: ( ) Fax: ( )	Have all materials in vicinity of the heater/s been reviewed and confirmed to meet minimum temperature requirements and assessed for safety ? *	Yes	No				
Mobile:	* Bromic takes no responsibility for suitability of materials in c	* Bromic takes no responsibility for suitability of materials in contact with the heater or within the minimum clearance requirements (as stipulated in installation instructions).					
Signature of authorised person:							
Name:							
Company: Position:							
Date: dd / mm / yyyy							