BROMIC HEATING

TUNGSTEN SMART-HEAT® ELECTRIC HEATER SERIES II

LOW CLEARANCE (LC) CEILING RECESS KIT INSTALLATION INSTRUCTIONS

FOR MODELS 2000W, 3000W, 4000W & 6000W

⚠ 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. Wait 2 hours after switching off the heater before handling.

⚠ WARNINGS

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

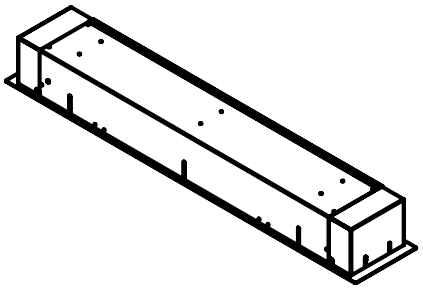
Instructions below are suitable for ceiling surfaces 10-30mm (0.39”-1.2”) thick. For ceiling surfaces thicker than 30mm (1.2”), contact Bromic for alternative installation options.

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

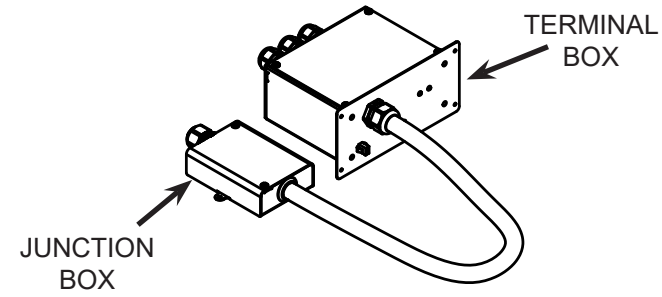
It is important that regular maintenance is carried out on the heater to maintain appearance. Inspect and clean more frequently in adverse conditions such as coastal environments.

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

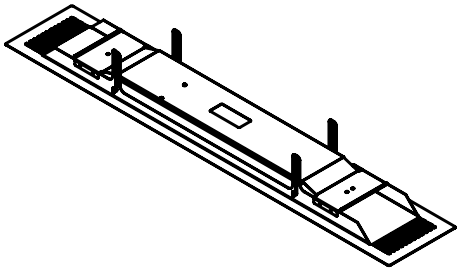
QR CODE INSTALLATION INSTRUCTIONS



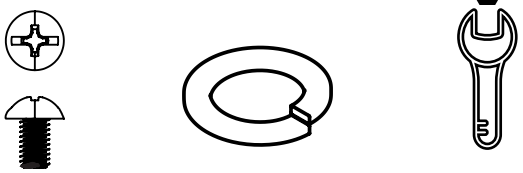
1x CEILING RECESS BOX



1x TERMINAL/JUNCTION BOX ASSEMBLY



1x TRIM ASSEMBLY

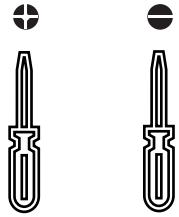


4x M4x8 SCREW
2x M4x6 SCREW
4x M5 SPRING WASHER
8MM SPANNER

HARDWARE

2 PERSON INSTALLATION

HEATER NOT INCLUDED



TOOLS REQUIRED

IMPORTANT

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

This manual contains important information about the installation, operation, and maintenance of the Low Clearance Ceiling Recess Kit for the Tungsten Smart-Heat Electric Series II 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:

DANGER, WARNING, 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 voltage as specified on the power rating label.
- Installation MUST be carried out by a licensed and authorised technician in accordance with local electrical codes.
- The Tungsten Smart-Heat Electric Series II Heater is intended for domestic and commercial use, unless otherwise specified.
- **The marine grade versions of the LC Ceiling Recess Kit shall be installed for land and coastal environment application ONLY.**
- **The IPX5 marine grade version of the LC Ceiling Recess Kit shall NOT be installed on marine craft.**

The Low Clearance Recess Kit is equipped with integrated cooling fans that require a dedicated unswitched power supply, independent of the heater's electrical supply connection. For wiring specifications and installation requirements, refer to the wiring section.

SAVE THESE INSTRUCTIONS

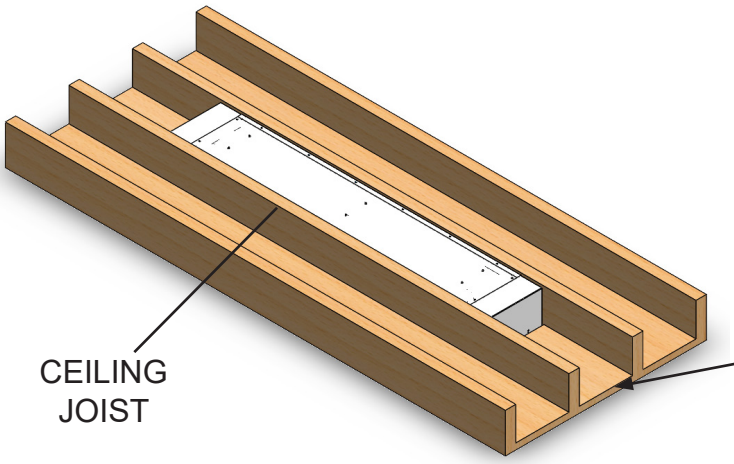
Telephone: 1(800) 301-1293 | Email: ServiceUSA@BromicGroup.com | Web: www.bromic.com | ©2025 Bromic Group. All Rights Reserved.

Note: Bromic Pty Ltd reserves the right to make changes to specifications, parts, components and equipment without prior notification.
This installation, operation and service manual may not be reproduced in any form without prior written consent from Bromic Pty Ltd.

SPECIFICATIONS		LC Ceiling Recess Kit					
Model		Standard (Select)					
Part No.	**All Regions**	BH3440862 (Black) / BH3440863 (White)			BH3440872 (Black) / BH3440873 (White)		
Total Ouput - Kit + Heater		2000W/4000W			3000W/6000W		
Power connection required (volts/amps) for fan		208V - A.C. - 60Hz - <1.0A **OR** 220-240V - A.C. - 50/60Hz - <1.0A **OR** 277V - A.C. - 60Hz - <1.0A					
Power connection required (volts/amps) for heater		**208V** - A.C. - 60Hz - 2KW: 9.6A - 4KW: 19.2A	**220-240V** - A.C. - 50/60Hz - 2KW: 8.3 - 9.1A - 4KW: 16.6 - 18.2A	**277V** - A.C. - 60Hz - 2KW: 7.2A - 4KW: 14.4A	**208V** - A.C. - 60Hz - 3KW: 14.4A - 6KW: 28.8A	**220-240V** - A.C. - 50/60Hz - 3KW: 12.5 - 13.6A - 6KW: 25 - 27.3A	**277V** - A.C. - 60Hz - 3KW: 10.8A - 6KW: 21.7A
Overall Dimensions (L x W x H)		1451 x 283 x 190.5 mm (57.1 x 11.1 x 7.5 ")			1744 x 283 x 190.5 mm (68.7 x 11.1 x 7.5 “)		
Weight		19kg (42lb)			22kg (49lb)		
Finish		Powdercoated Stainless Steel 304					
Approval							
Patent		Australian Patent 2023219853					

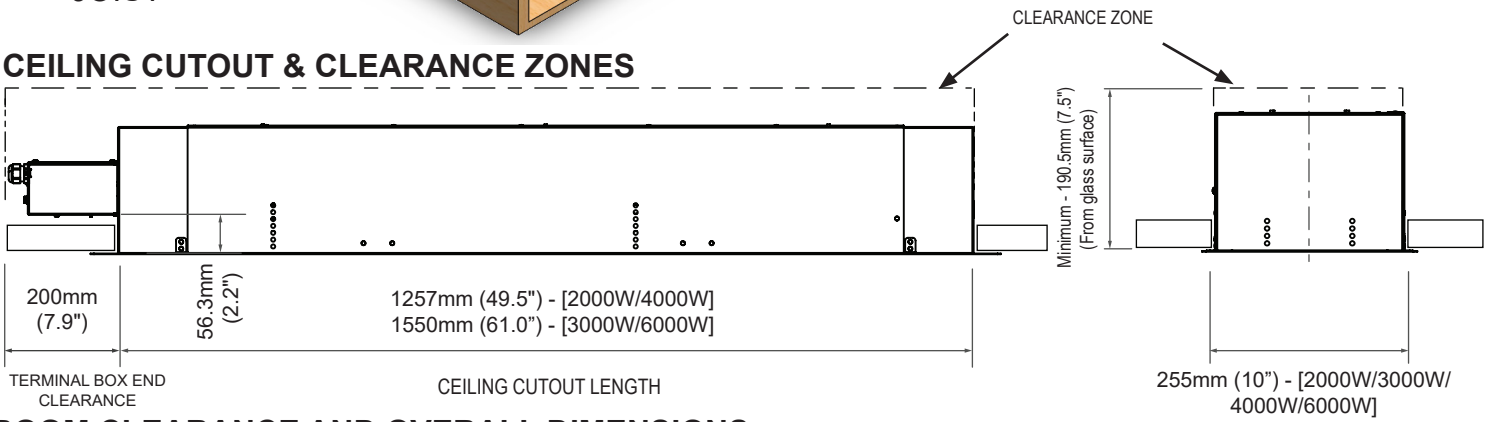
SPECIFICATIONS		LC Ceiling Recess Kit					
Model		Coastal (Marine)					
Part No.	**All Regions**	BH3450862 (Black) / BH3450863 (White)			BH3450872 (Black) / BH3450873 (White)		
Total Ouput - Kit + Heater		2000W/4000W			3000W/6000W		
Power connection required (volts/amps) for fan		208V - A.C. - 60Hz - <1.0A **OR** 220-240V - A.C. - 50/60Hz - <1.0A **OR** 277V - A.C. - 60Hz - <1.0A					
Power connection required (volts/amps)		**208V** - A.C. - 60Hz - 2KW: 9.6A - 4KW: 19.2A	**220-240V** - A.C. - 50/60Hz - 2KW: 8.3 - 9.1A - 4KW: 16.6 - 18.2A	**277V** - A.C. - 60Hz - 2KW: 7.2A - 4KW: 14.4A	**208V** - A.C. - 60Hz - 3KW: 14.4A - 6KW: 28.8A	**220-240V** - A.C. - 50/60Hz - 3KW: 12.5 - 13.6A - 6KW: 25 - 27.3A	**277V** - A.C. - 60Hz - 3KW: 10.8A - 6KW: 21.7A
Overall Dimensions (L x W x H)		1451 x 283 x 190.5 mm (57.1 x 11.1 x 7.5 ")			1744 x 283 x 190.5 mm (68.7 x 11.1 x 7.5 “)		
Weight (Including heater)		19kg (42lb)			22kg (49lb)		
Finish		Powdercoated Stainless Steel 316					
Approval							
Patent		Australian Patent 2023219853					

ISOMETRIC VIEW DEPICTING LOW CLEARANCE RECESS KIT INSTALLATION SETUP OPTIONS

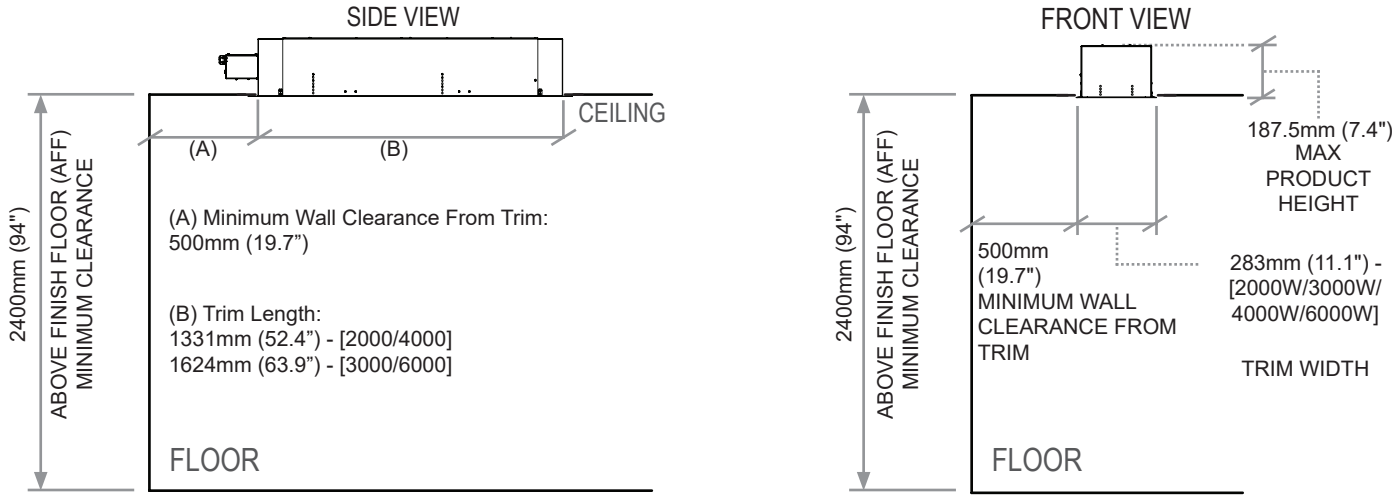


The example depicts the recess kit fixed on the length sides only. The installer is responsible for ensuring product is installed in a structurally sound configuration.

CEILING CUTOUT & CLEARANCE ZONES



ROOM CLEARANCE AND OVERALL DIMENSIONS



⚠ WARNING

The appliance shall, under no circumstances, be covered with insulating material or similiar material.

Minimum Cavity Depth must be 190.5mm (7.5").

Minimum clearance measured from the terminal box end to the nearest surface must be 200mm (7.9").

Minimum clearance from the ceiling cutout and the nearest wall must be 500mm (19.7").

Minimum distance between heaters measured from edge of ceiling cut out must be 500mm (19.7”) with exception for Australia/New Zealand minimum 2000mm (78.7”)*.

Minimum distance between the heater surface and finished floor is 2400mm (94”).

Note:
Under AS/NZ 60335.2.30:2015 clause 7.12.1 specifies the distance between the sides of the heater and the sides and any adjacent ceiling recessed heater shall not be less than four times the minimum distance specified for the distance between the sides of the heater and any building element adjacent to it.

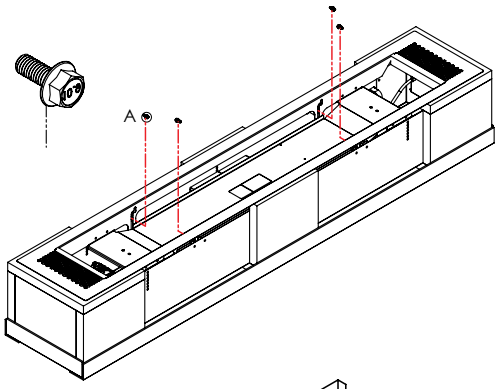
Maximum gradient of mounting from horizontal is 6.4mm (1/4”) over a 25.4mm (1.0”) slope. Control box must be mounted at lowest end.

Standard Versions (Select)

Ensure that the heating unit is not directly exposed to rain or water contact. For the longest product life and to maintain product appearance, mount the heater under cover and protect from rain and weather.

Packaging

Remove **4x M5x12mm flanged Hex Screws** using the supplied **8mm spanner.**

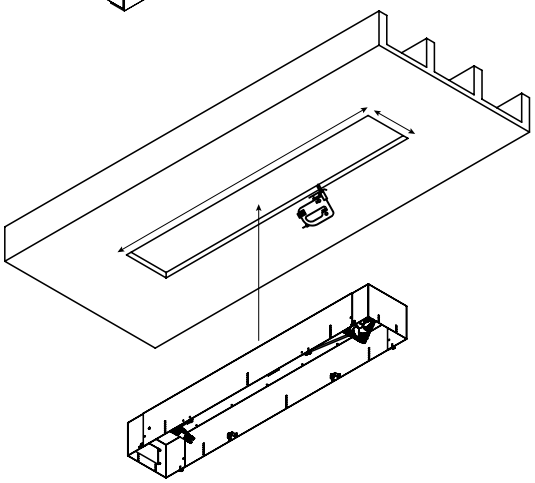


Remove Ceiling Recess Box, Trim assembly, and center box (includes terminal/Junction box assembly, and hardware) from packaging.

Assembly Instructions

1. Prepare ceiling cut-out with the dimensions :

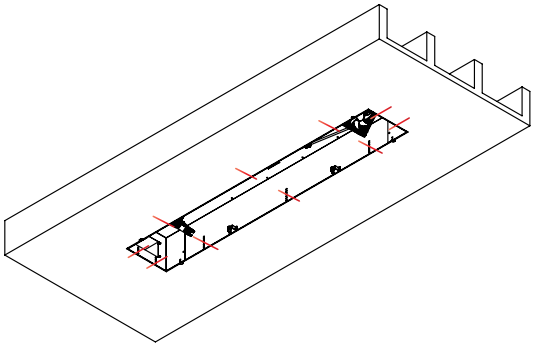
2000W/4000W - 1257mm x 255mm (49.5” X 10”)
3000W/6000W - 1550mm x 255mm (61” X 10”)



Heater must be installed with heater surface at least 2400mm (94") above the finished floor (AFF), with minimum clearance measured from the terminal box end to the nearest surface being 200mm (7.9”). Minimum heater to heater distance measured from edge of heater must be 500mm (19.7”). Refer to the install dimensions on page 3.

2. Fasten the ceiling recess box into ceiling with 6x (minimum) appropriate fasteners (not supplied) along the long edges, and 4x (minimum) appropriate fasteners (not supplied) along the short edges.

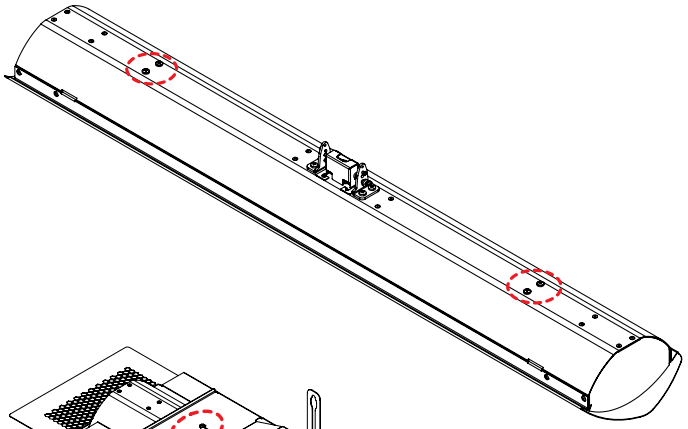
NOTE: The fastening screws must be inserted into a strong material that can easily support the weight of the assembly. Your installation may require re-enforcing before the frame can be safely installed.



IMPORTANT
It is the installers responsibility to ensure that the installation site is structurally suitable for the mass of the Recess Kit and Heater installation being 23.5kg (52 lb) [2000/4000W] or 27.5kg (61 lb) [3000W/6000W].

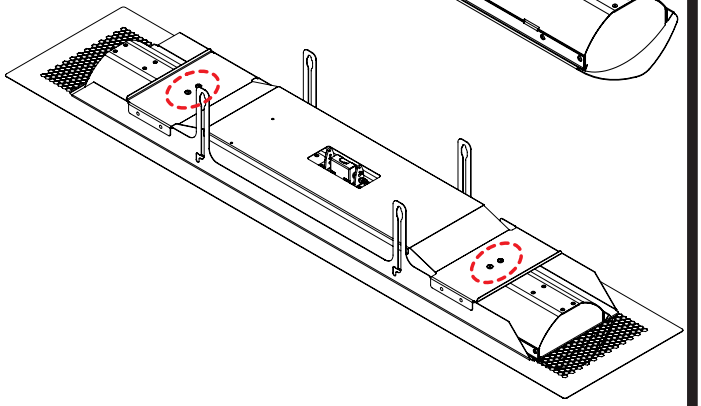
MINIMUM 10 FASTENERS TO BE USED FOR TIMBER MEMBERS.

3. Place the Tungsten heater on a non-scratching surface.

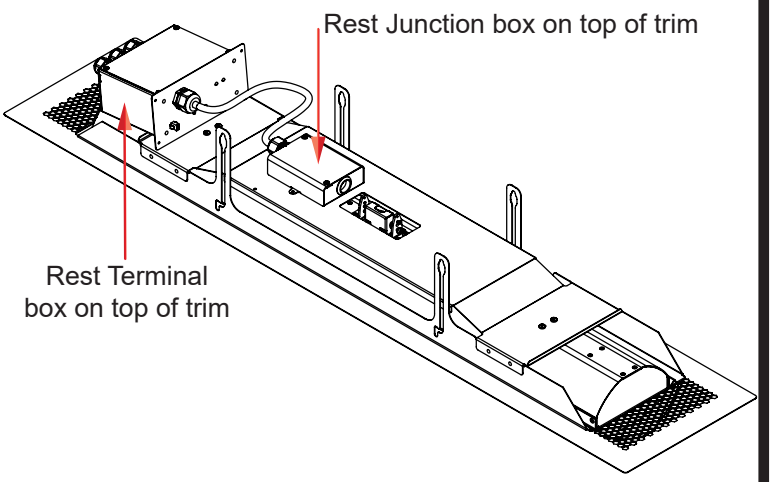


4. Remove **4x M5x12mm** Philips head screws on the heater and set aside for later.

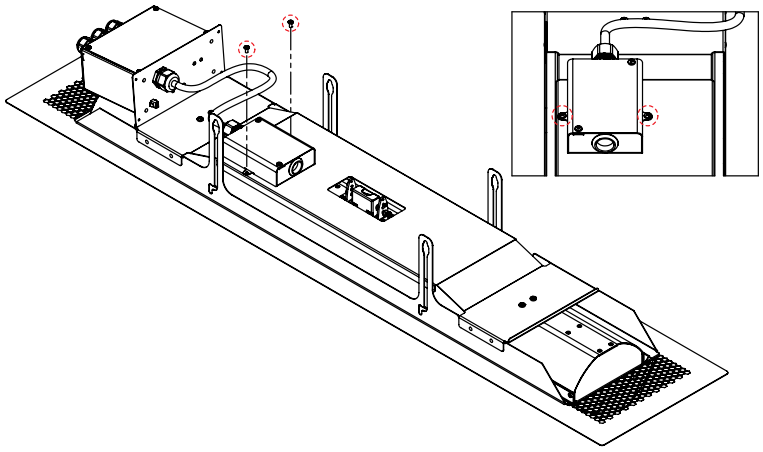
5. Place the trim assembly on top of the Tungsten heater. Secure the trim assembly to the Tungsten using the **4x M5 Spring washers** and the **4x M5x12mm** Philips head screws set aside in the previous step. Ensure the heater is centered within the trim mounting holes (circled in image).



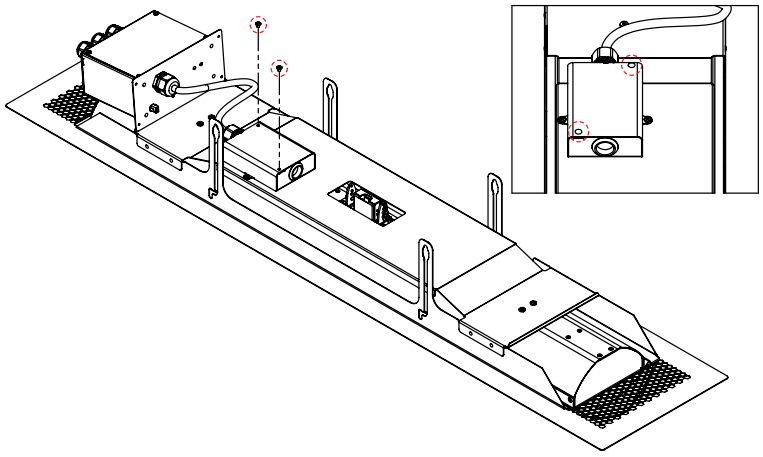
6. Place the terminal/Junction box assembly on top of the trim assembly, ensuring it is resting without sliding off.



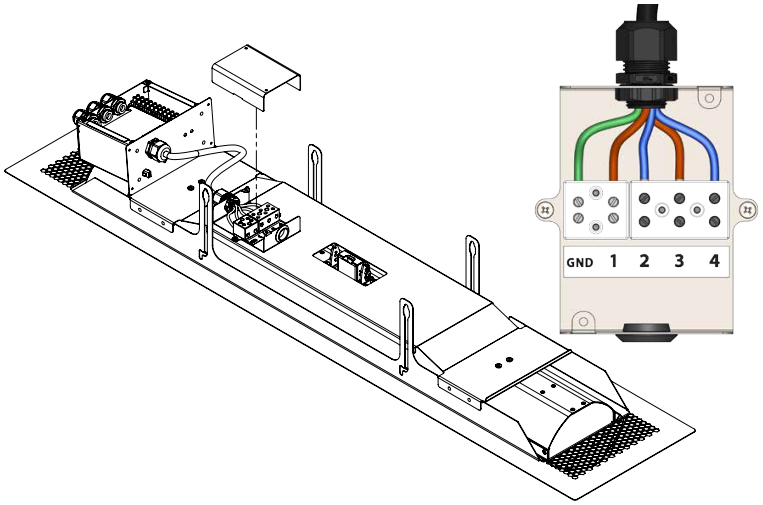
7. Secure the junction box to the trim assembly with **2x M4x6mm** phillips head screws (Supplied).



8. Open the Junction Box:
   - Remove **2x M4x6mm** phillip's head screws.

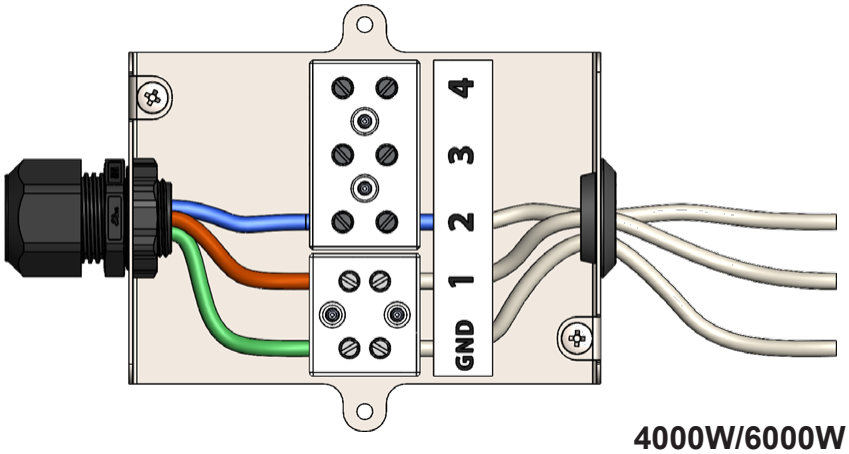


   - Lift off junction box top cover
   - Set both screws, and the top cover aside.



9. Inside the Junction Box, connect the wires from the heater (GND, 1, 2, 3, 4) to the terminal block holes (GND, 1, 2, 3, 4).

2000W/3000W



4 = NOT USED

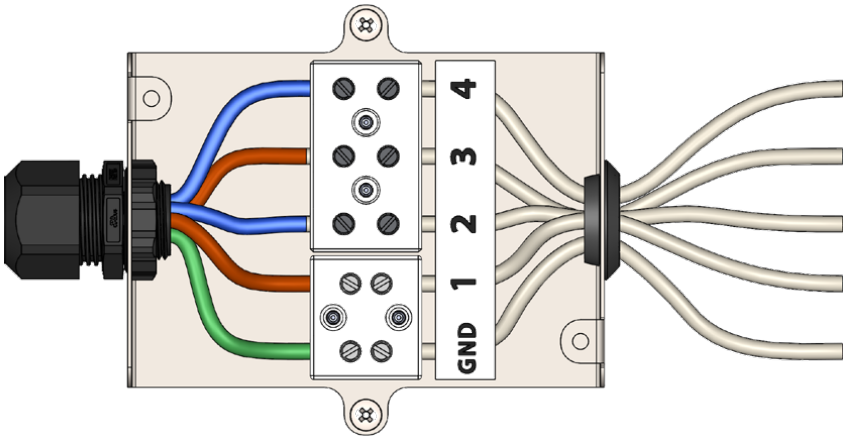
3 = NOT USED

2 = HEATER WIRE 2

1 = HEATER WIRE 1

GND = HEATER WIRE GROUND

4000W/6000W



4 = HEATER WIRE 4

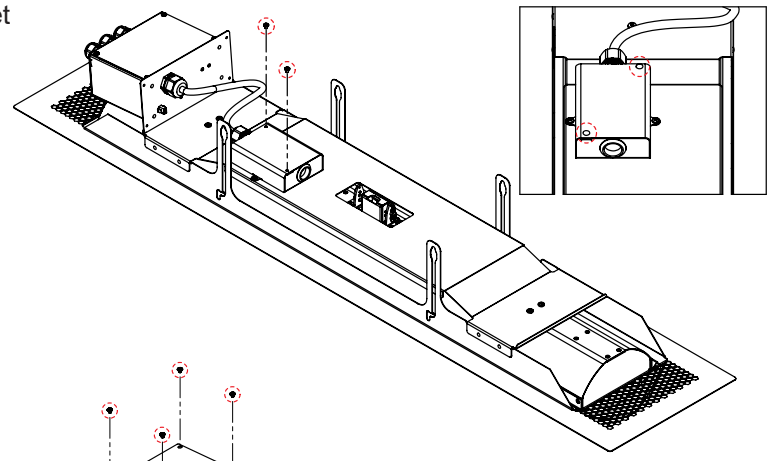
3 = HEATER WIRE 3

2 = HEATER WIRE 2

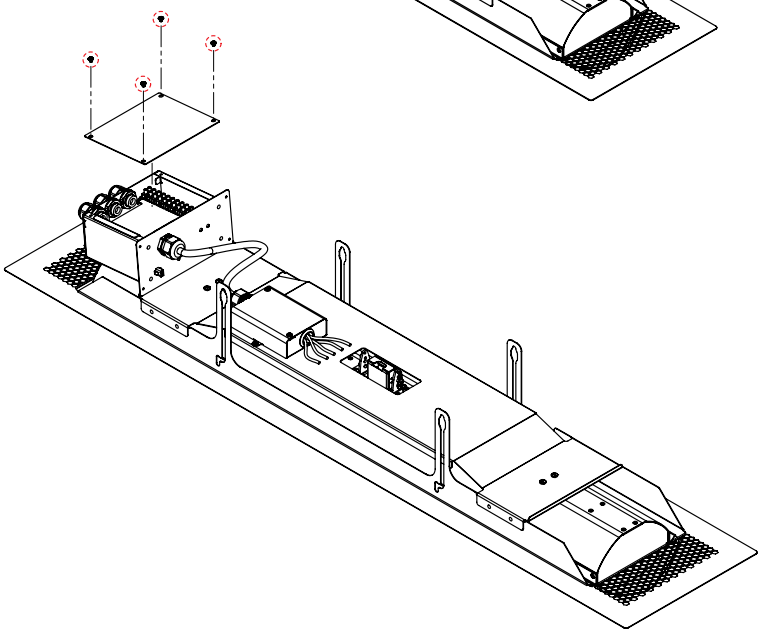
1 = HEATER WIRE 1

GND = HEATER WIRE GROUND

10. Reattach the lid of the junction box with the previously set aside **2x M4x6mm** phillips head screws.



11. Open the Terminal Box
- Remove **4x M4x6mm** phillip's head screws.
- Lift off Terminal Box top cover
- Set both screws, and the top cover aside.



WARNING

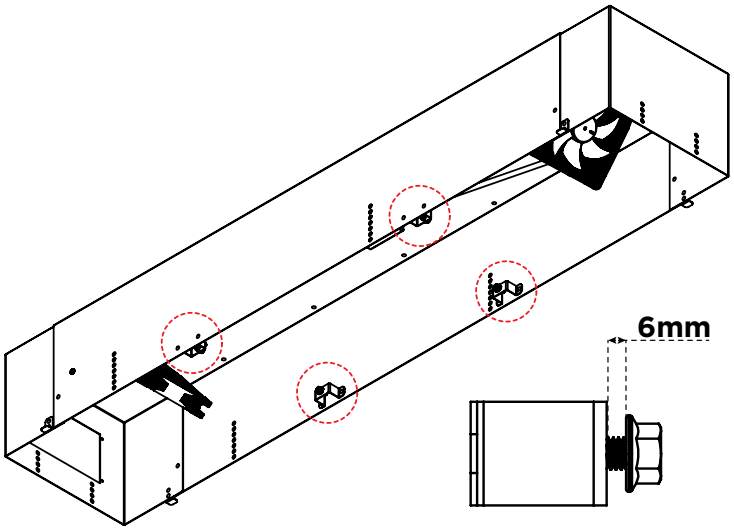
This heater MUST be permanently installed by an authorised/ licenced person. Do not perform maintenance, or carry out installation or assembly procedure while electrical power is switched on. To disconnect heater, turn off power to heater circuit at main disconnect panel .

12. On the LCCRK chassis:
- Loosen the **4x M5x12mm** Flanged Hex Screws.
- Ensure there is a minimum 6mm gap betweeen the screw flange and mounting bracket.

MIN 2 PEOPLE REQUIRED FOR FOLLOWING STEPS.

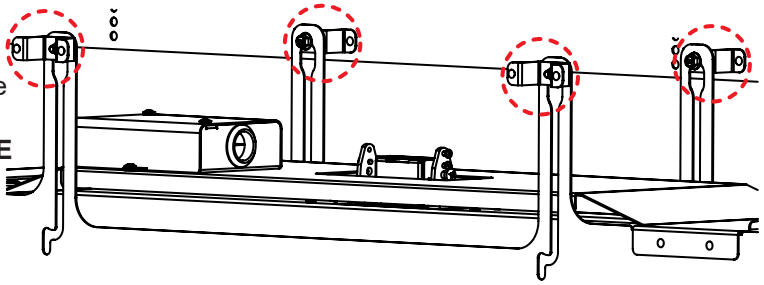


MAX SAFE LIFTING 16 kg (26.5 lbs) PER PERSON.



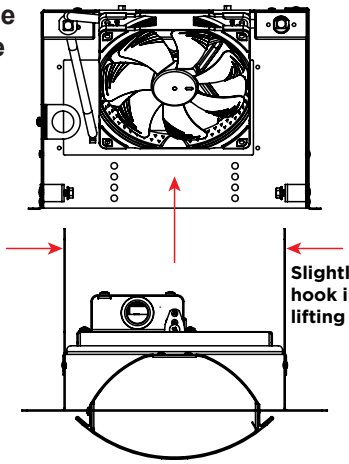
13. Hooking Trim assembly to LCCRK Chassis:

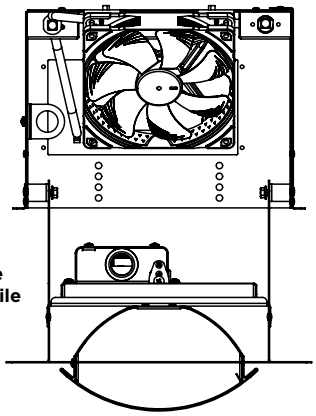
With the junction box still on top of the trim assembly, hook the trim assembly onto the protruding hex screws on the Chassis. **CHECK ORIENTATION OF HOOKS AS THEY CAN ONLY BE MOUNTED IN ONE DIRECTION!**



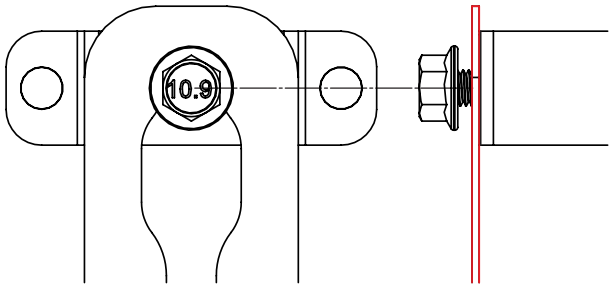
Installation Tips:

A) To avoid the hooks hitting the screws while lifting up the trim assembly, slightly press the hooks inwards to provide more clearance past the screws.

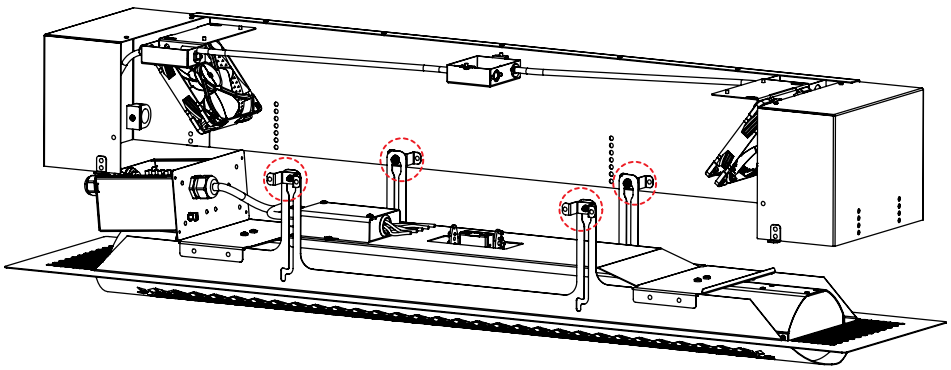




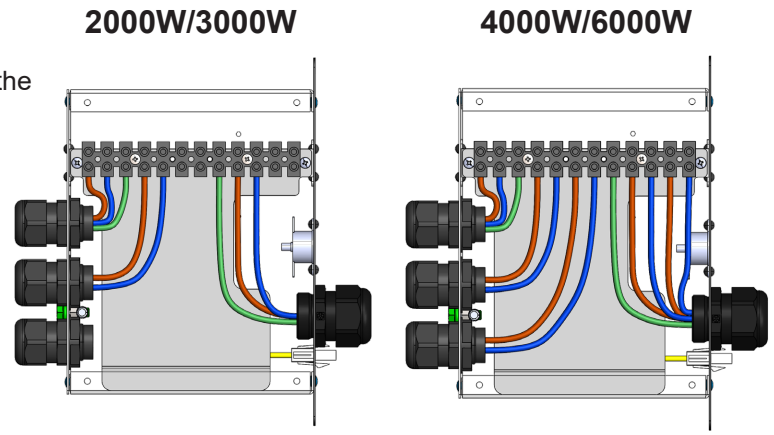
B) Ensure all 4 hooks on the trim assembly are resting in between the screw flange and mounting bracket.



C) DO NOT AT ANY POINT OF INSTALLATION, HANG THE TRIM ASSEMBLY WITHOUT ALL 4 HOOKS NOT RESTING ON THE HEX SCREW THREAD!

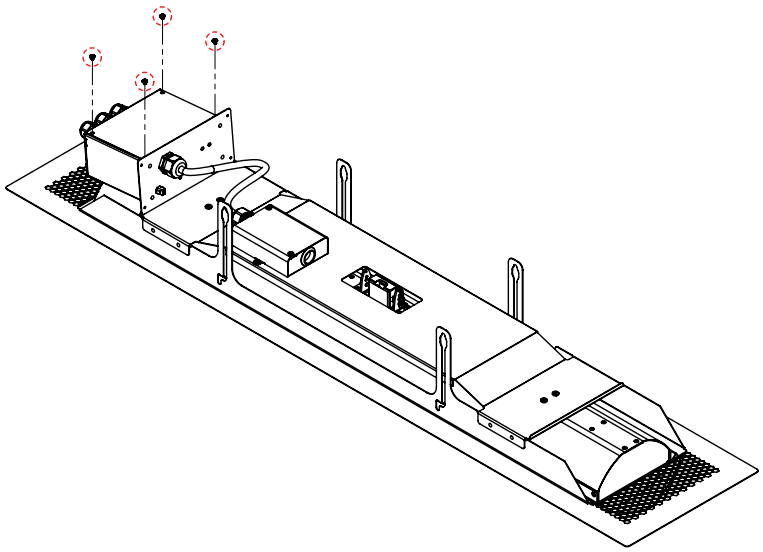


13. Inside the Terminal Box:
- Feed the power supply (and control cables if applicable) through the cable gland on the rear of the terminal box.

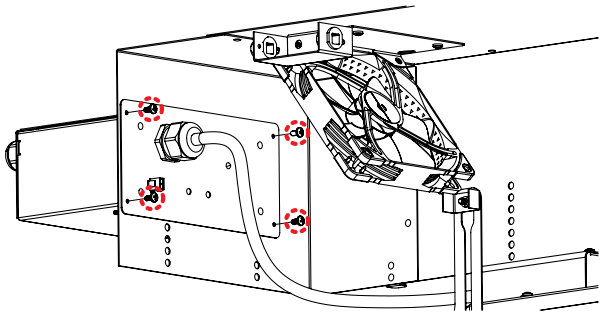


⚠ - **For connections, refer to the wiring diagrams in the electrical connection section.**

14. Close the Terminal Box with the **4x M4x6mm** phillip's head screws set aside earlier.

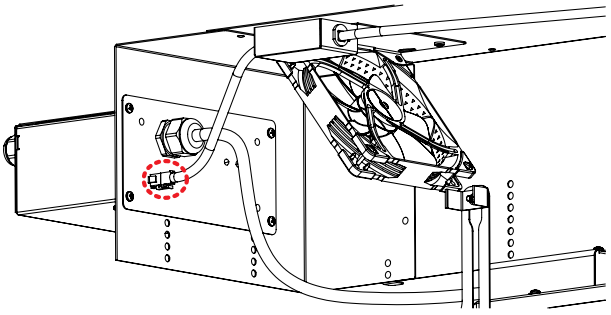


15. Mounting the Terminal Box:
- Fasten the Terminal Box into the ceiling recesss box using **4x M4x8mm** screws (Supplied).

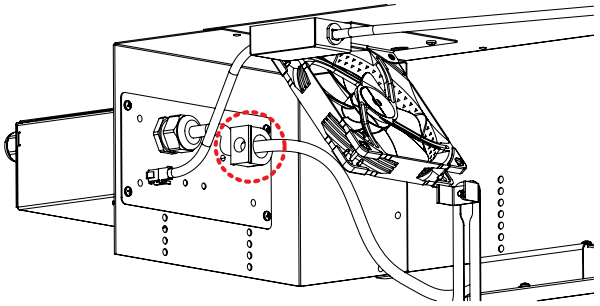


⚠ - **Ensure the Terminal Box does not hit the fan or fan bracket during mounting!**

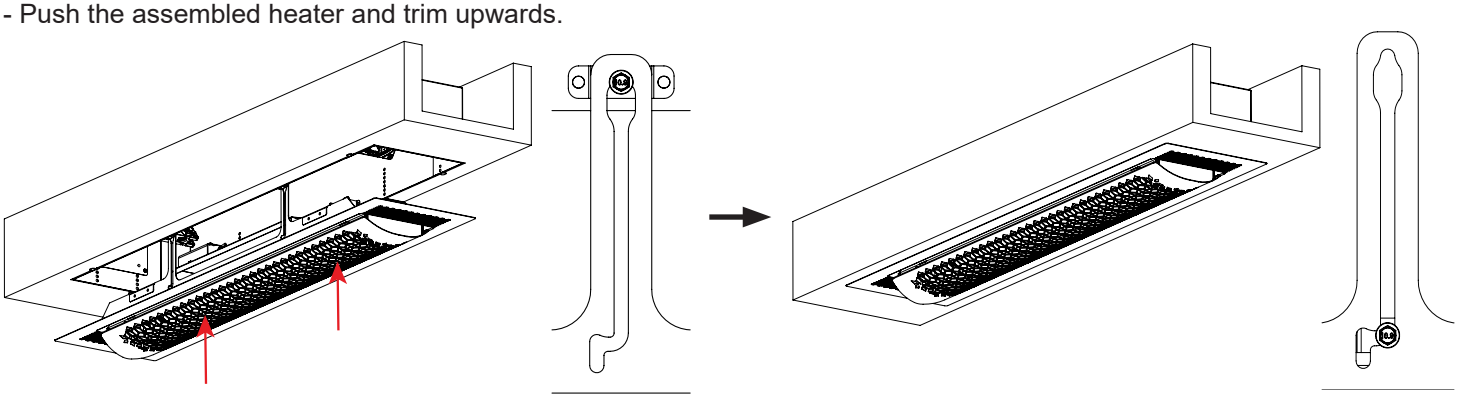
- Plug the 2-Pin harness of the Fan assembly into the terminal box.



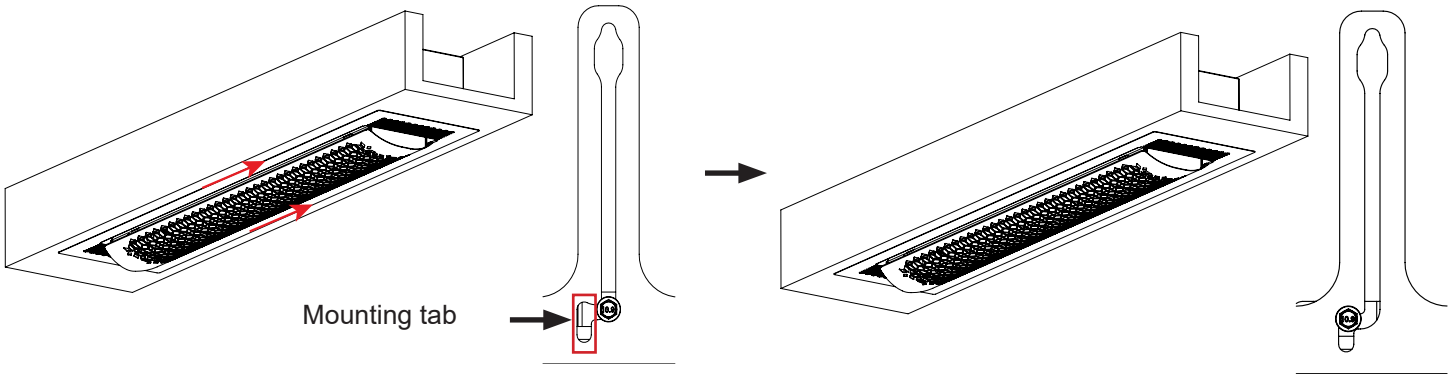
- Unclip the cable mount clip, insert Silicon Sleeved harness (Connected between Terminal Box and Junction Box) and re-clip cable mount clip.



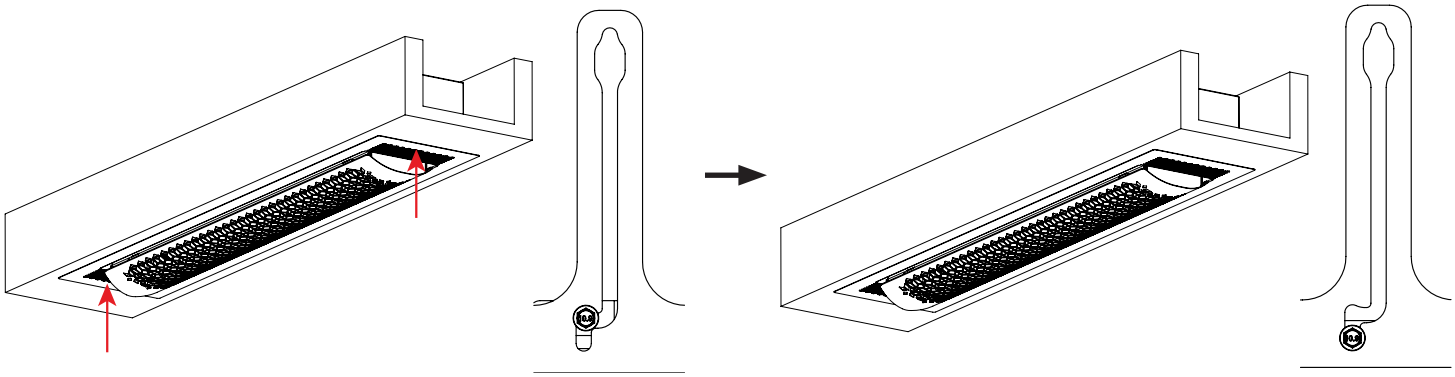
17. To mount the Trim Assembly to chassis:
- Push the assembled heater and trim upwards.



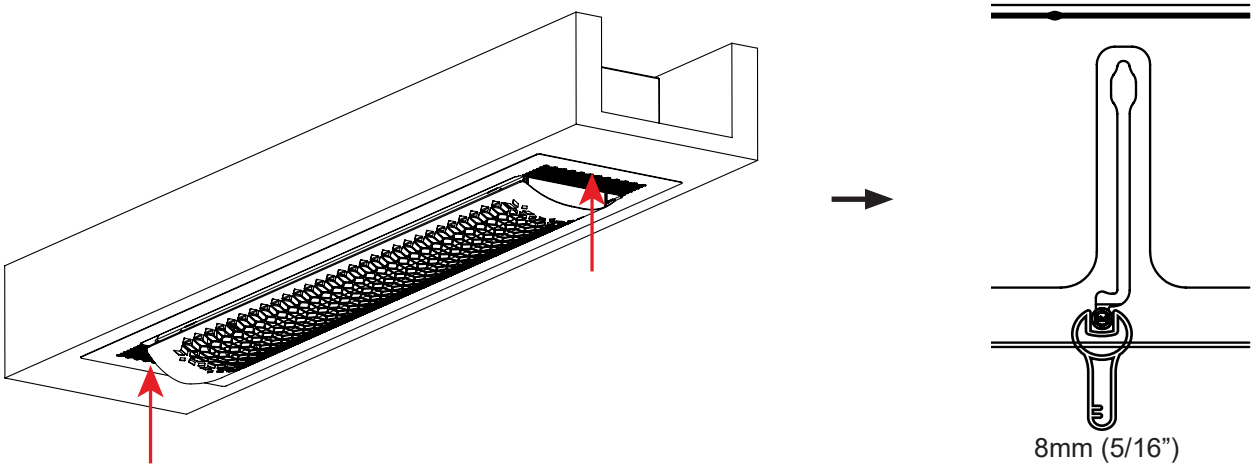
- Slide the trim horizontally (away from the Terminal Box) until the hex screws are latched into the mounting tab.
- Ensure all 4 hex screws are resting on the mounting tab.



- Raise up the heater trim assembly so it is flush with the ceiling.



- Tighten the **4x M5x12mm** Flanged Hex Bolts using a 8mm (5/16”) spanner (Supplied) to secure the heater in place.
- For flush alignment, ensure heater is pressed up while tightening the screws.



ELECTRICAL INSTALLATION

1. 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 electrical code regulations. For outdoor installation, all connections must be made in accordance with local electrical code regulations for outdoor wiring. Only use wiring components approved for outdoor use with minimum IPX5 rating.

⚠ 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 .

⚠ WARNING

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.

For wiring instructions using Bromic SmartHeat Dimmer(s) or ON/OFF Control(s) refer to instructions provided with controller.

IMPORTANT: Electronic dimmer controls generate heat during operation. For Bromic heaters installed Bromic SmartHeat Dimmer(s) or ON/OFF Control(s) it is essential to ensure dimmers are mounted in a clean, dry and well ventilated position with clearance on all sides. It must be ensured the dimmers are not installed in a confined space, close to other heat generating appliances or in the case of a multi-dimmer installation, not too close together. Dimmers must remain cool at all times. Please consult Bromic dimmer installation instructions for further details or for further questions please contact Bromic technical support services.

SERVICING

⚠ WARNING

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

⚠ WARNING

Servicing and maintenance 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.

⚠ WARNING

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

Ensure that the heating unit is not directly exposed to rain or water contact. For longest product life, and to maintain product appearance, mount heater under cover and protect from rain and weather whenever possible.

The exterior housing of the heater should be cleaned fortnightly. 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.

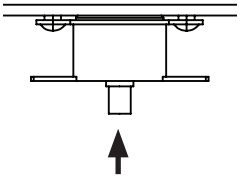
Salt in the air can cause rusting of metal, especially in coastal environment. Additional cleaning of the heater with a soft damp cloth fortnightly will aid in maintaining the product's appearance.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
No heat	1. Improper Connection 2. Self resetting thermal switch not plugged in 3. Non-self resetting thermal switch has triggered.	1. Check connection to power supply 2. Check self resetting thermal switch is plugged in (see step 15). 3. Reset Non-self resetting thermal switch located inside terminal box (see electrical diagram).
Not enough heat	1. Heater too small for application 2. Heater mounted too high or too far 3. Incorrect voltage connected to heater.	1. Add additional heater(s) 2. Decrease mounting height or distance. 3. Check correct supply voltage and current is provided
Too much heat	1. Heater too large for application 2. Heater mounted too low or too close 3. Incorrect voltage connected to heater	1. Replace with smaller heater 2. Increase mounting height or distance 3. Check correct supply voltage is provided.

Non-self resetting thermal switch

In the event that the temperatures exceed safe operating limits, the non-self resetting thermal switch will trigger. This may be due to the fan being damaged or the heater is operating at a high ambient temperature. To reset the switch, push down on the reset button at the middle of the switch. THE LOCATION IS SHOWN ON PAGE 13.

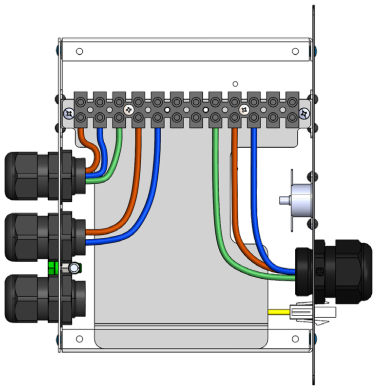


⚠ WARNING

Ensure circuit is not live before attempting to reset the safety switch.

IMPORTANT
Ensure wires connected into terminals are fastened adequately by the terminal screws. Conduct a light pull test on wires to check

IMPORTANT
Fan power supply must be constant and powered at all times i.e. not before a switch. The fan must operate independently to the heater at all times.



2000W/3000W KIT

FAN POWER

1. Connect AC fan power supply L1 wire into **TERMINAL 1**.
2. Connect AC fan power supply L2 (or neutral) wire into **TERMINAL 2**.
3. Connect AC fan power supply ground/earth wire into **TERMINAL 3**.

HEATER POWER

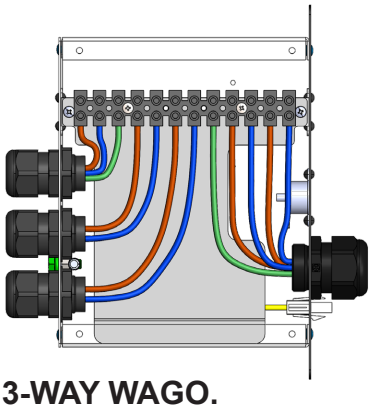
4. Connect AC heater power supply L1 wire into **TERMINAL 4**.
5. Connect AC heater power supply L2 (or neutral) wire into **TERMINAL 5**.

NOTE: Heater power supply wires can come from a wall switch or a controller.
Any earth/ground wires can be combined into a single wire that connects into **TERMINAL 3.**

HEATER OUTPUT

6. Connect heater **GREEN/YELLOW** ground/earth wire into **TERMINAL 6**.
7. Connect heater **BROWN** L1 wire into **TERMINAL 7**.
8. Connect heater **BLUE** L2 (or neutral) wire into **TERMINAL 8**.

IMPORTANT
Fan power supply must be constant and powered at all times i.e. not before a switch. The fan must operate independently to the heater at all times.



4000W/6000W KIT

FAN POWER

1. Connect AC fan power supply L1 wire into **TERMINAL 1**.
2. Connect AC fan power supply L2 (or neutral) wire into **TERMINAL 2**.
3. Connect AC fan power supply ground/earth wire into **TERMINAL 3**.

HEATER POWER

4. Connect AC heater power supply L1 wire into **TERMINALS 4 & 6**, using a **3-WAY WAGO.**
5. Connect AC heater power supply L2 (or neutral) wire into **TERMINAL 5 & 7**, using a **3-WAY WAGO.**

NOTE: Separate power supply wires can be used to independently control elements. Refer to wiring diagram on page 15.

NOTE: Heater power supply wires can come from a wall switch or a controller.
Any earth/ground wires can be combined into a single wire that connects into **TERMINAL 3.**

HEATER OUTPUT

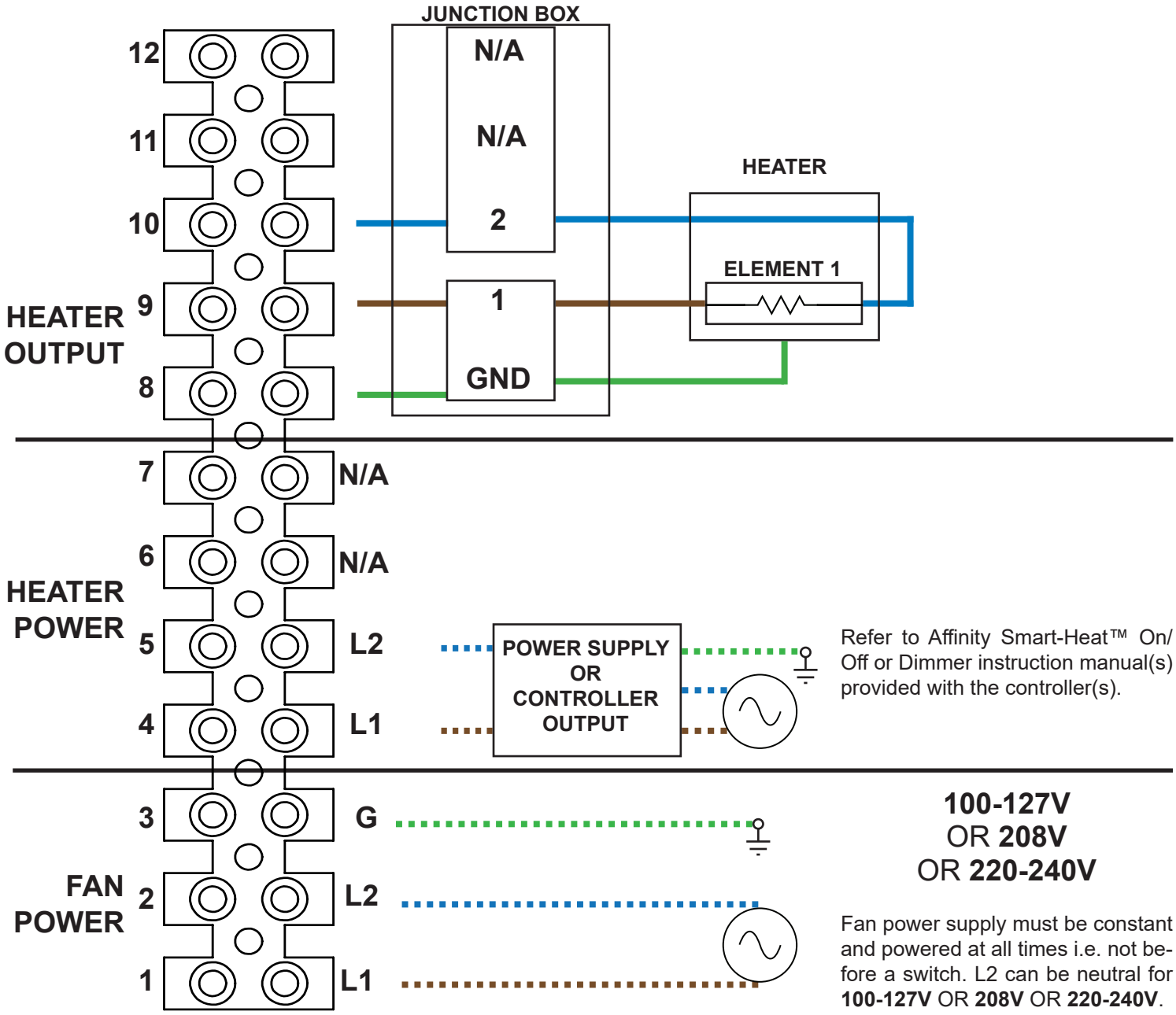
6. Connect heater **GREEN/YELLOW** ground/earth wire into **TERMINAL 8**.
7. Connect heater **RED** L1 wire into **TERMINAL 9**.
8. Connect heater **BLACK** L2 (or neutral) wire into **TERMINAL 10**.
9. Connect heater **WHITE** L1 wire into **TERMINAL 11**.
10. Connect heater **GREY** L2 (or neutral) wire into **TERMINAL 12**.

WIRING DIAGRAM:

2000W/3000W KIT WITH AFFINITY SMART-HEAT™ 1-CHANNEL CONTROLLER

ALL CONNECTIONS ADJUSTED BY THE INSTALLER ARE DISPLAYED.

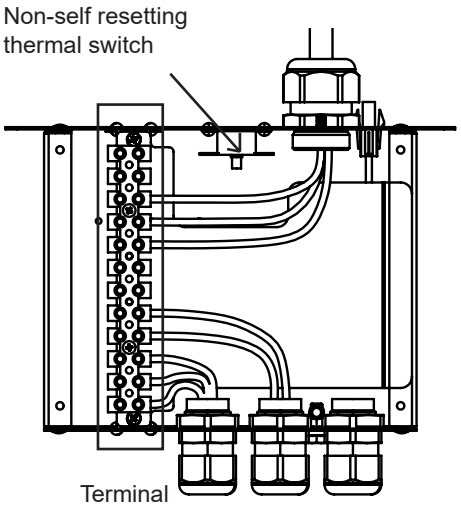
ITEMS IN HEATER OUTPUT (TERMINALS 8-12) ARE PRE-WIRED AND SHALL NOT BE MODIFIED!



Refer to Affinity Smart-Heat™ On/Off or Dimmer instruction manual(s) provided with the controller(s).

100-127V
OR **208V**
OR **220-240V**

Fan power supply must be constant and powered at all times i.e. not before a switch. L2 can be neutral for **100-127V** OR **208V** OR **220-240V**.



WIRES DENOTED BY DASHED LINES ARE SUPPLIED BY THE INSTALLER.



WARNING

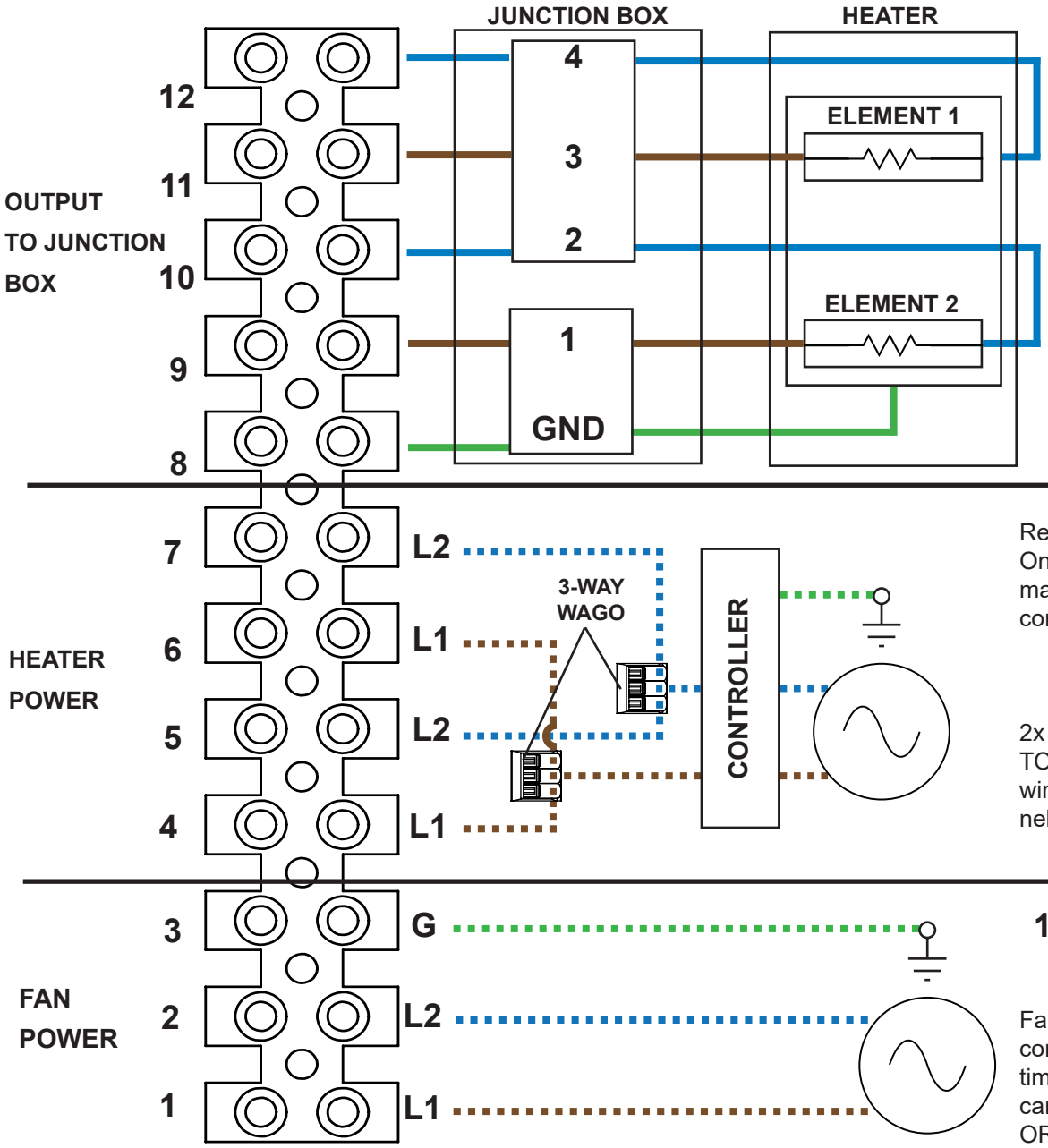
AC Single Phase Heater must be permanently installed and hard wired by an authorised/licensed person.

This product is designed for use with both 220-240V & 208V Platinum Electric Heaters.

WIRING DIAGRAM:

4000W/6000W KIT WITH AFFINITY SMART-HEAT™ 1-CHANNEL CONTROLLER

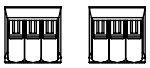
ALL CONNECTIONS ADJUSTED BY THE INSTALLER ARE DISPLAYED.



ITEMS IN HEATER OUTPUT (TERMINALS 8-12) ARE PRE-WIRED AND SHALL NOT BE MODIFIED!

Refer to Affinity Smart-Heat™ On/Off instruction manual(s) provided with the controller(s).

Refer to Affinity Smart-Heat™ On/Off or Dimmer instruction manual(s) provided with the controller(s).

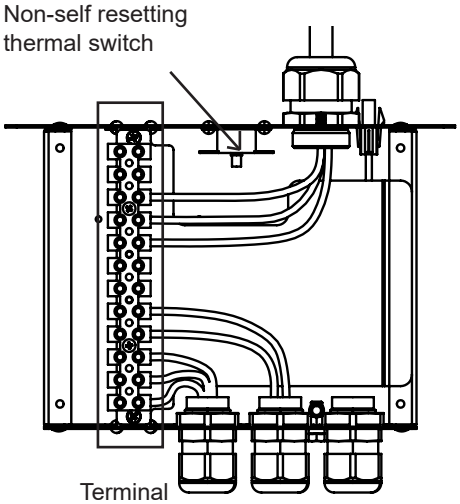


2x 3-WAY WAGO CONNECTORS are provided to make wiring connections for 1-channel output.

100-127V OR **208V** OR **220-240V**

Fan power supply must be constant and powered at all times i.e. before a switch. L2 can be neutral for **100-127V** OR **208V** OR **220-240V**.

Non-self resetting thermal switch



Terminal strip

WIRES DENOTED BY DASHED LINES ARE SUPPLIED BY THE INSTALLER.



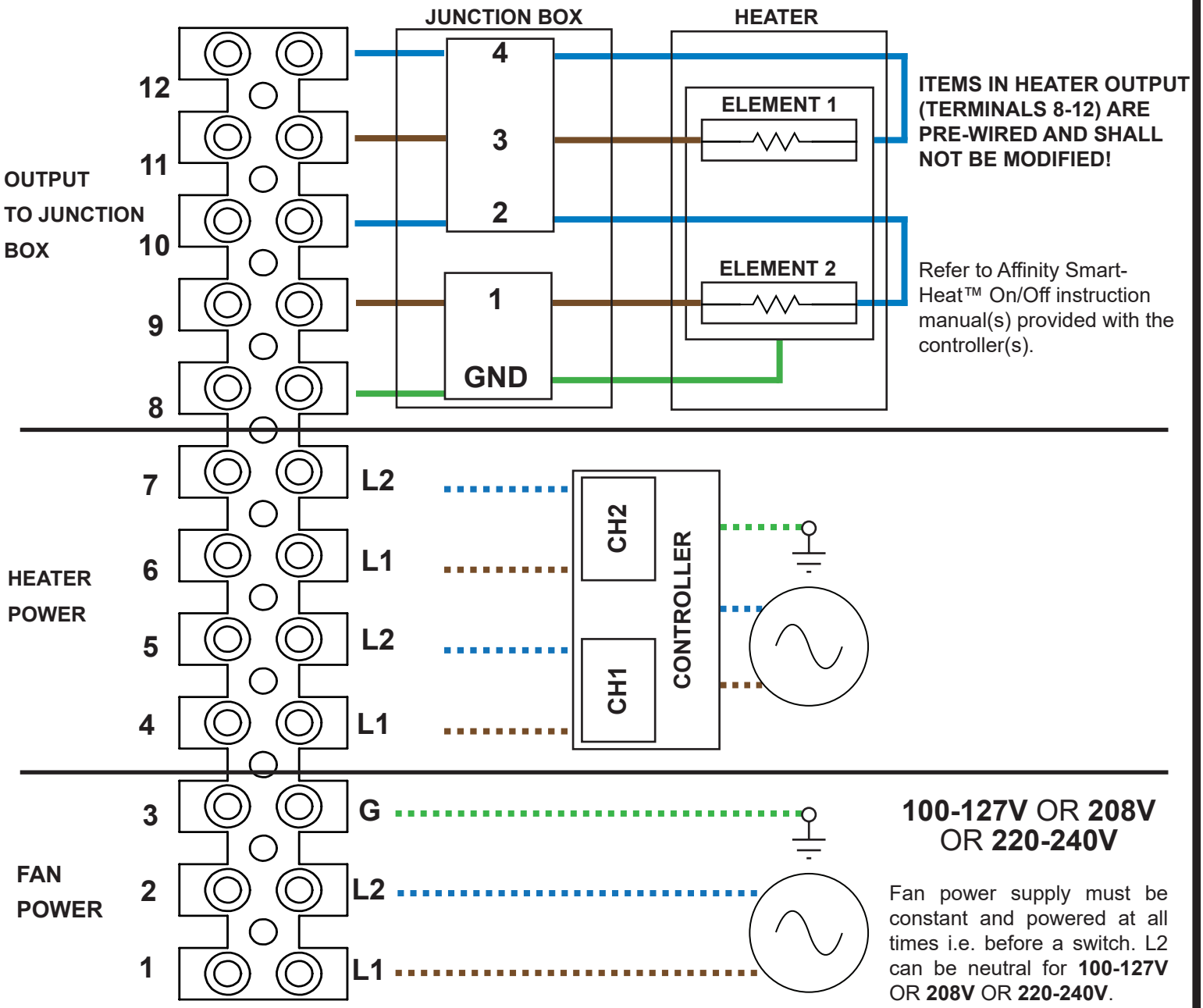
WARNING

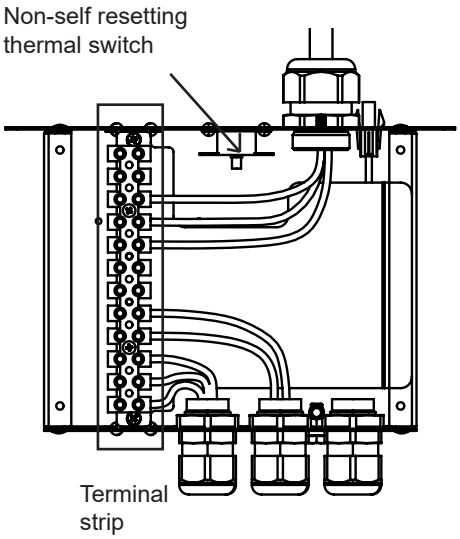
AC Single Phase Heater must be permanently installed and hard wired by an authorised/licensed person.

This product is designed for use with both 220-240V & 208V Platinum Electric Heaters.

WIRING DIAGRAM (FOR INDIVIDUAL ELEMENT CONTROL):
4000W/6000W KIT WITH AFFINITY SMART-HEAT™ 2-CHANNEL CONTROLLER

ALL CONNECTIONS ADJUSTED BY THE INSTALLER ARE DISPLAYED.





WIRES DENOTED BY DASHED LINES ARE SUPPLIED BY THE INSTALLER.

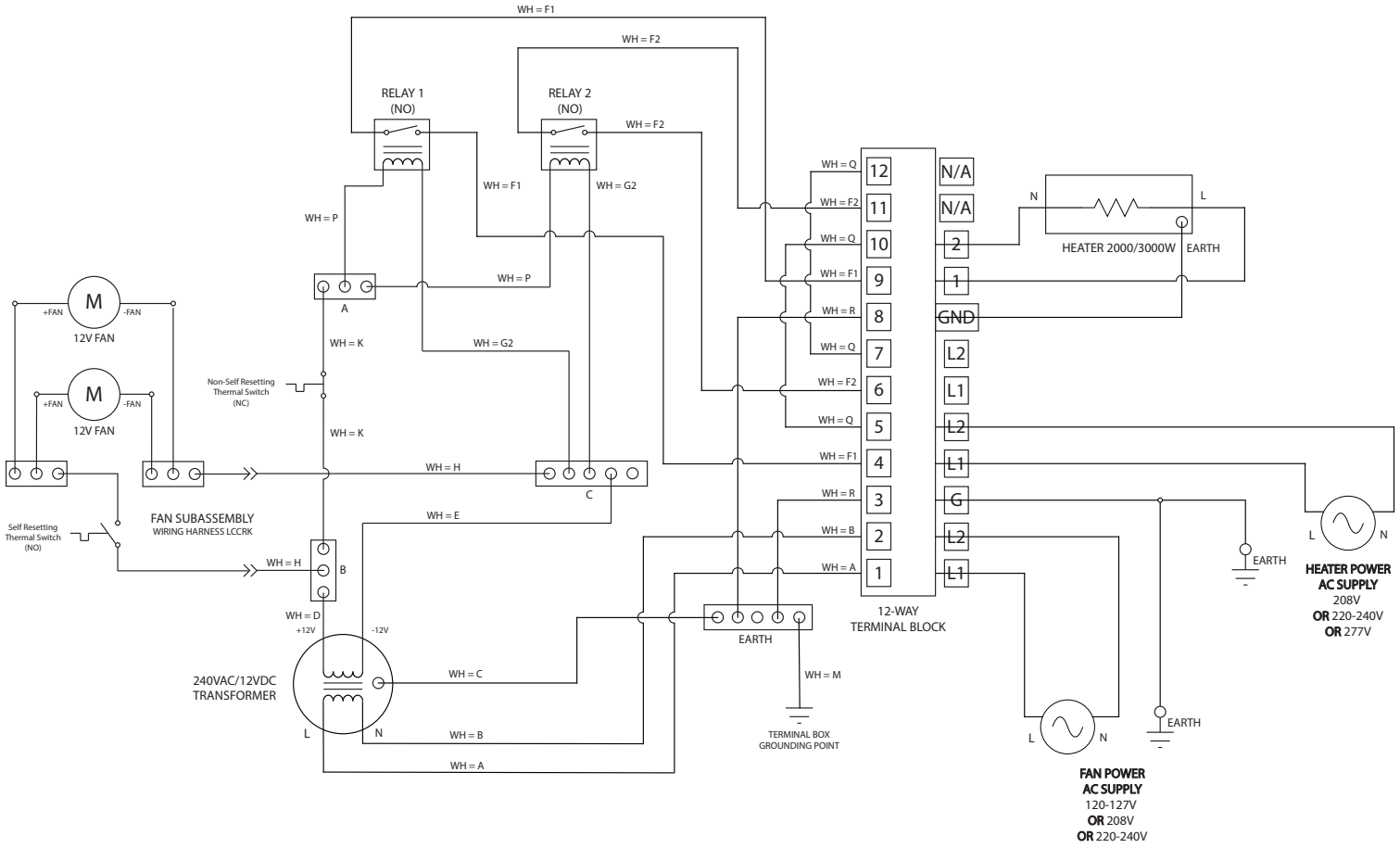


WARNING

AC Single Phase Heater must be permanently installed and hard wired by an authorised/licensed person.

This product is designed for use with both 220-240V & 208V Platinum Electric Heaters.

ELECTRICAL DIAGRAM 2000W/3000W KIT



ELECTRICAL DIAGRAM 4000W/6000W KIT

