

FOR INSTALLER - BEFORE YOU START

To install and operate the Bromic Smart-Heat Control you MUST have access to the following:

- An app-enabled smart device with internet connectivity.
(Minimum Requirements: Bluetooth 4.2, Android 8.1, iOS 14.3 or greater)
- The Bromic Smart-Heat App, available for download on the Apple App Store and Google Play Store using the QR codes below.
- A Bromic Smart-Heat account or access to email for registration.
- The name and email address of the primary user.
- [Wi-Fi only] The SSID and password of a local Wi-Fi network operating on 2.4GHz.

For installation instructions (mounting instructions, mounting orientation, and electrical wiring), refer to manual.



SCAN FOR
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App Store



Play Store

Bluetooth Control



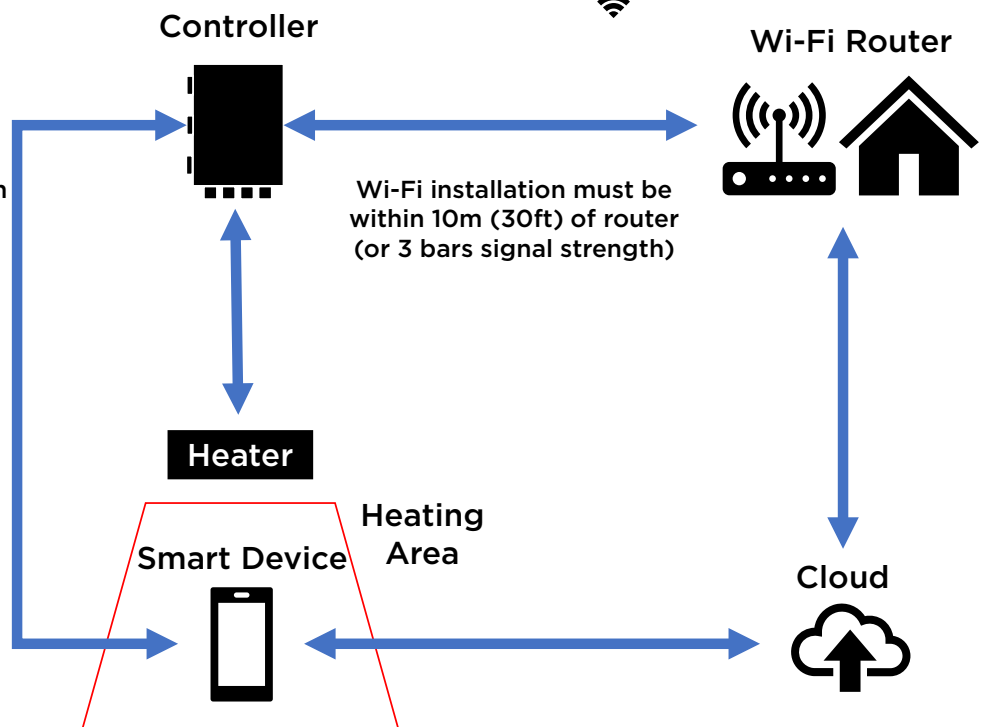
Controller must be within 10m (30ft) of heating area for Bluetooth control

OR

Wi-Fi Control



Wi-Fi installation must be within 10m (30ft) of router (or 3 bars signal strength)



DIFFERENCES BETWEEN BLUETOOTH AND WI-FI COMMUNICATION

BLUETOOTH Communication	WI-FI Communication
<ul style="list-style-type: none"> • Controller mounting location must be within 10m (30ft) of the heating location(s). • Only 1 smart device may be used at a time. • During operation, the smart device must be within 10m (30ft) of the controller. • Enables you to control heaters individually and use the timer off function. 	<ul style="list-style-type: none"> • Controller mounting location must be within 10m (30ft) of a router (or smart device indicates 3 bars of Wi-Fi at the mounting location). • Enables multiple users simultaneously. • Enables off-site control. • Enables additional features (Zoning/ grouping and Scene automation).



Cancer and Reproductive Harm - www.P65Warnings.ca.gov



AVERTISSEMENT PROP. 65 POUR LES RESIDENTS DE LA CALIFORNIE



Cancer et Troubles de l'appareil reproducteur - www.P65Warnings.ca.gov



ADVERTENCIA PROP. 65 PARA LOS RESIDENTES DE CALIFORNIA



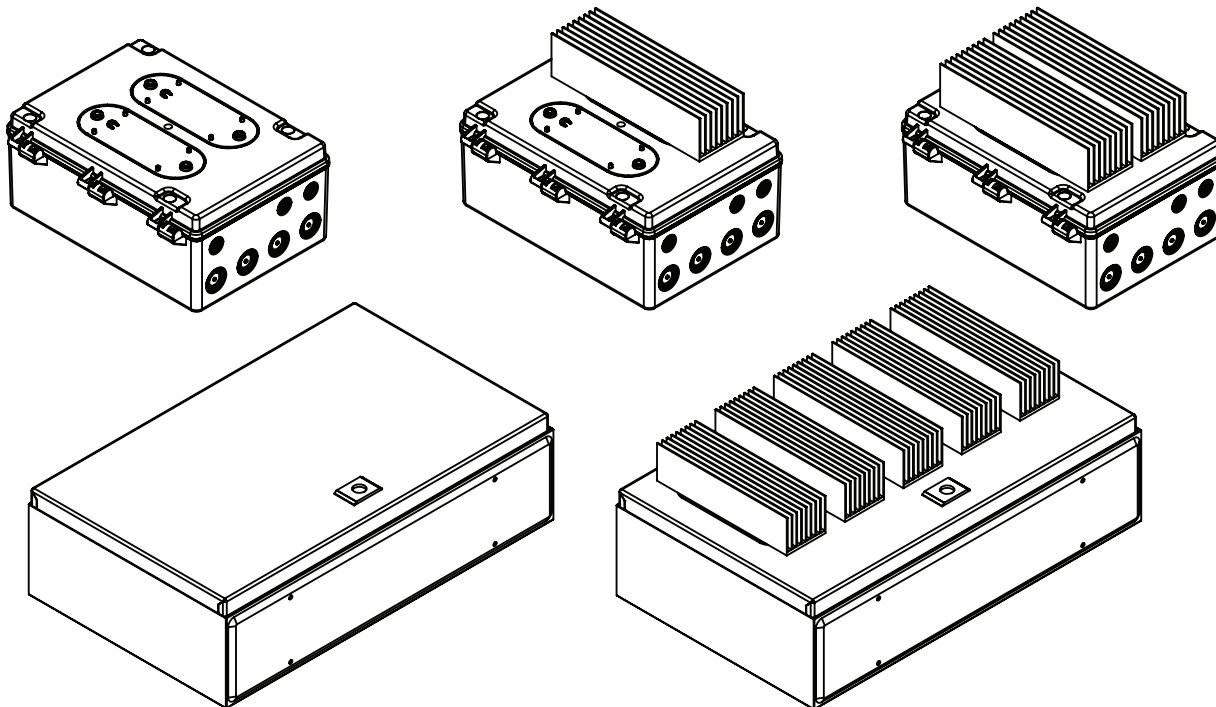
Cancer y Daño Reproductivo - www.P65Warnings.ca.gov

SMART-HEAT CONTROL BY BROMIC

INSTALLATION AND INSTRUCTION MANUAL

FOR MODELS:

- Smart-Heat Control On/Off 1 CH
- Smart-Heat Control On/Off 2 CH
- Smart-Heat Control Dimmer 1 CH
- Smart-Heat Control Dimmer 2 CH
- Smart-Heat Control On/Off 5 CH
- Smart-Heat Control Dimmer 5 CH
- Smart-Heat Control Eclipse Pendant 1 CH
- Smart-Heat Control Eclipse Pendant 5 CH



SCAN FOR
LATEST MANUAL



SCAN FOR APP
ON APPLE APP
STORE



SCAN FOR APP
ON GOOGLE
PLAY STORE



IMPORTANT

READ THE INCLUDED 'FOR INSTALLER - BEFORE YOU START' SHEET.
READ THIS MANUAL CAREFULLY.
SEE INSIDE COVER FOR IMPORTANT INFORMATION ABOUT THIS MANUAL.
KEEP INSTRUCTION WITH APPLIANCE FOR FUTURE REFERENCE.

ORIGINAL INSTRUCTIONS

AU/UK/US_REV 23

This manual contains important information about the installation and operation of the Smart-Heat Controls. 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 this product.
- Improper installation or operation can result in death, severe injury, or property damage.
- Use the Smart-Heat Control only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- Installation MUST be carried out by a licensed and authorized electrical technician in accordance with local electrical codes.
- The Smart-Heat Control is intended for domestic and commercial use, unless otherwise specified.
- The Smart-Heat Control must only be used with Bromic's range of compatible gas and electric heaters.
- This product has no serviceable parts inside and must not be opened after installation.
- The Smart-Heat Control can only be operated using the Bromic Smart-Heat App downloadable on the App Store and Google Play Store.

Note that gas heaters are only compatible with the ON/OFF models



SAVE THESE INSTRUCTIONS

Correct disposal of this product



This marking indicates that this product should not be disposed with other household wastes throughout the EU/US. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer from whom the product was purchased so that they may organize environmentally safe recycling.

BROMIC
HEATING

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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.

IMPORTANT NOTES & WARNINGS	6
PRODUCT DESCRIPTION	7
PRODUCT FEATURES	7
PRODUCT SPECIFICATIONS	7
PACKAGING CONTENTS	9
TOOLS/PARTS REQUIRED	10
INSTALLATION INSTRUCTIONS	11
INSTALLATION CLEARANCES & PRODUCT DIMENSIONS	11
MOUNTING INSTRUCTIONS	12
ELECTRICAL INSTALLATION	14
HEATER TYPES & LOAD DISTRIBUTION	15
WIRING DIAGRAMS	17
OPERATING INSTRUCTIONS	27
APP SETUP	27
REGULAR USE	27
MAINTENANCE	27
VOICE ACTIVATION	28
AMAZON ALEXA INSTRUCTIONS	28
GOOGLE HOME INSTRUCTIONS	28
EXPANSION BOARD INSTALLATION	29
ETHERNET CONNECTION	30
CONNECTION FOR HOME AUTOMATION OR BUILDING MANAGEMENT SYSTEM (BMS)	30
TROUBLESHOOTING	31

IMPORTANT NOTES & WARNINGS



WARNING

- Read all instructions before installing or using this controller.
- Use this controller only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- 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 controller should be used in a responsible manner and that all procedures, warnings, and safety instructions contained in this booklet be followed strictly.
- The storage temperature for the product is between -30°C (-22°F) and 70°C (158°F). This temperature range is applicable when the product is not in use for extended periods (e.g. summer).
- The product must be fixed on surfaces that cannot be damaged by temperatures as high as 60°C (140°F). It must be installed in a well-ventilated location. It cannot be hermetically closed. It must be installed out of reach, and if wall mounted, it must be vertical with cable glands downward.
- The connection cables must be protected against any accidental impacts.
- This controller is not intended for use in bathrooms, laundry areas and similar indoor locations. Never locate controller where it may fall into a bathtub or other water container.
- Do not install the controller directly near a bathtub, shower, or swimming pool.
- Do not install controller where children may gain access to it.
- This controller 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.
- Keep packaging materials out of reach of children.
- Children and adults should be alerted to the hazards of electrocution and stay away to avoid serious personal injury.
- Children should be carefully supervised when they are in the controller area.
- Do not attempt to alter the controller in any manner.
- Do not paint any surface of the controller.
- Do not touch the controller with wet hands at any time.
- Do not use or store flammable materials near this appliance.
- Do not spray aerosols or flammable materials near the controller while it is in operation.
- Never operate the controller in an explosive environment, such as areas where petrol or other flammable liquids or vapours are stored.
- Do not hang any foreign items off any part of this controller e.g. do not hang towels, clothing, lines, lights, cables.
- Always ensure the controller and any connected devices has been switched off for 2 hours before touching any attached heat sink.

INSTALLATION

- **IMPORTANT** - Installation must be carried out by a licensed and authorized electrical technician.
- The installer is to ensure that the requirements of the local authority, local electrical installation code, municipal building codes, and any other relevant statutory regulations are carried out.
- After unpacking, make sure the controller shows no signs of visible damage or tampering. If the controller appears damaged, contact the place of purchase for assistance.
- Remove transit protection before use.
- This appliance must only be used on a 100 - 277 Volt AC electricity supply.

- This controller is NOT intended to be installed on recreational vehicles and/or boats.
- Do not run cords under carpeting. Do not cover with throw rugs, runners or the like. Arrange cords away from the traffic area and where it will not be tripped over.
- A controller has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint or flammable liquids are used or stored.
- This Installation and Operation manual should not be removed from the installation site. Installer should leave the manual with the customer for future reference.
- If the controller has not been used, or will not be used, for an extended period, disconnect the power supply.
- For the disconnection from the power line, use an all-pole switch with contacts having a dimension of at least 3.5mm.

MAINTENANCE/ REPAIR

- This product has no serviceable parts and must not be opened after installation is complete.
- Installation must be carried out by a qualified & licenced service person only. The controller should be inspected before use and at least annually inspected by a qualified & licenced service person.
- Check for damage to the controller regularly. If damage to the appliance is suspected, discontinue use immediately and contact the supplier.
- 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 center for waste electrical and electronic equipment. The user is responsible for disposal 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 environmental damage and possible related health risks and 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.

ELECTRICAL CONNECTIONS

- All connections must be rated for the power rating of the control model and heater model being installed. Connection must have an earth connection.
- Arrange all the necessary safety devices and use only materials that comply with standard electrical installations.
- Low voltage circuits and wiring must be separated from the other circuits.
- The supply circuit must include an isolation switch and/or circuit breaker in accordance with local electrical regulations. In the US, a 2 pole isolation switch and/or circuit breaker must be installed for 2 phase electrical supplies.
- To maintain Ingress Protection Rating (IP54), only suitable IP54 (or better) rated outdoor plug & sockets should be used for electrical installation. The product must be protected from direct contact with water.
- A readily accessible disconnect device shall be incorporated into the building installation wiring.
- This product does not have a switch for electrical disconnection. A means for disconnection of the control must be incorporated in the fixed wiring according to the local electrical codes.
- The cable must have a section properly rated according to the load connected and a nominal temperature range of up to 90°C (194°F). The Smart-Heat Control Dimmer will regulate output power by switching off the load if temperature in the heat sink exceeds 80°C (176°F).
- The maximum power per channel is 6000W. Refer to page 15 for amperage capacity based on supply voltage.
- 100 - 127V AC supplies are for gas heaters only and may only be used with the Smart-Heat Control On/Off. The maximum amperage per channel when installing gas heater is 10A.

PRODUCT DESCRIPTION

The Smart-Heat Control provides on/off or dimming control for Bromic heaters. The Smart-Heat Control requires a smart device with internet connectivity, as well as the Bromic Smart-Heat App which is available on the App Store and Google Play Store.

The base model provides both Bluetooth and Wi-fi communication capabilities, with optional expansion board available for alternative communication methods (ethernet or 0 - 10 V DC input control from Building Management Systems (BMS) or home automation).

PRODUCT FEATURES

Set-up and operation of this product requires access to an iOS or Android smart device with internet connectivity (e.g. smartphone or tablet) and the Bromic Smart-Heat App. The control offers the following features:

- IP54 protection rating, suitable for outdoor installation.
- Suitable to control wide range of Bromic products.
- Both Bluetooth and Wi-Fi enabled communication.

Using the Bromic Smart-Heat App, you will be able to:

- Control Bromic heaters (either on/off or dim depending on the control model).
- Set a timer to turn off any connected heater.
- Access usage statistics.
- Invite other users to control your connected heaters.

Wi-Fi connected controllers will also allow you to:

- Operate heaters off-site (Wi-Fi enabled connections only).
- Schedule heating times for maximum comfort.
- Create zones to control multiple heaters simultaneously.

PRODUCT SPECIFICATIONS - ON/OFF MODELS

Model	Smart-Heat Control On/Off 1 CH	Smart-Heat Control On/Off 2 CH	Smart-Heat Control On/Off 5 CH
Part Number	BH3130051	BH3130052	BH3130053
Number of Channels	1	2	5
Supply	a.c. 50-60Hz	a.c. 50-60Hz	a.c. 50-60Hz
Supply Phase	Single Phase	Single or 2 Phase	3 Phase
Voltage - Max Capacity Per Channel	100-127V - 1kW / 220-240V - 6kW 200V - 6kW (Japan Only) 208-277V - 6kW (North America Only)	100-127V - 1kW 220-240V - 6kW 200V - 6kW (Japan Only) 208-277V - 6kW (North America Only)	3N- 220/380V - 6kW 3N- 230/400V - 6kW 3N- 240/415V - 6kW 3N- 277/480V - 6kW 3- 100/200V - 6kW (Japan Only) 3- 120/208V - 6kW (North America Only)
Rated Impulse Voltage	2500V	2500V	2500V
Operating Temperature Range	-20°C to +30°C / -4°F to +86°F	-20°C to +30°C / -4°F to +86°F	-20°C to +30°C / -4°F to +86°F
Non-Operating Temperature Range	-30°C to +70°C / -22°F to +158°F	-30°C to +70°C / -22°F to +158°F	-30°C to +70°C / -22°F to +158°F
Operating Humidity Range	0-85%	0-85%	0-85%
Protection Rating	IP54	IP54	IP54
Dimensions	290 x 202 x 112mm 11.4 x 8.0 x 4.4"	290 x 202 x 112mm 11.4 x 8.0 x 4.4"	500 x 340 x 202mm 19.7 x 13.4 x 8.0"
Weight	1.4kg / 3.1lbs	1.6kg / 3.6lbs	11.0 kg / 24.3lbs
Front Cover Fastener	4 x Captive Phillips Screw 12G (Torque 1.8 Nm)	4 x Captive Phillips Screw 12G (Torque 1.8 Nm)	Double bit key for locking
Ground Connection Type	Internal busbar with M4 screw, spring washer and nut	Internal busbar with M4 screw, spring washer and nut	Internal busbar with M6 ring terminal, spring washer and nut
Current Terminal Type	Screw terminal	Screw terminal	M6 Ring terminal
Current Terminal Size (Max)	10mm ² / 8 AWG	10mm ² / 8 AWG	M6 Ring terminal
Input Cable Gland Size	1 x M25 (Torque 8 Nm)	2 x M25 (Torque 8 Nm)	3 x M40 (Torque 8 Nm)
Output Cable Gland Size	1 x M25 (Torque 8 Nm)	2 x M25 (Torque 8 Nm)	5 x M25 (Torque 8 Nm)

Please see heater types and load distribution on page 15 for maximum loads per channel.

PRODUCT SPECIFICATIONS - DIMMER MODELS

Model	Smart-Heat Control Dimmer 1 CH	Smart-Heat Control Dimmer 2 CH	Smart-Heat Control Dimmer 5 CH
Part Number	BH3130061	BH3130062	BH3130063
Number of Channels	1	2	5
Supply	a.c. 50-60Hz	a.c. 50-60Hz	a.c. 50-60Hz
Supply Phase	Single Phase	Single or 2 Phase	3 Phase
Voltage - Max Capacity Per Channel	220-240V - 6kW 200V - 6kW (Japan Only) 208-277V - 6kW (North America Only)	220-240V - 6kW 200V - 6kW (Japan Only) 208-277V - 6kW (North America Only)	3N- 220/380V - 6kW 3N- 230/400V - 6kW 3N- 240/415V - 6kW 3N- 277/480V - 6kW 3- 100/200V - 6kW (Japan Only) 3- 120/208V - 6kW (North America Only)
System Impedance (Zmax) (1)	0.18 ohm	0.18 ohm	0.18 ohm
Rated Impulse Voltage	2500V	2500V	2500V
Operating Temperature Range	-20°C to +30°C / -4°F to +86°F	-20°C to +30°C / -4°F to +86°F	-20°C to +30°C / -4°F to +86°F
Non-Operating Temperature Range	-30°C to +70°C / -22°F to +158°F	-30°C to +70°C / -22°F to +158°F	-30°C to +70°C / -22°F to +158°F
Operating Humidity Range	0-85%	0-85%	0-85%
Protection Rating	IP54	IP54	IP54
Dimensions	290 x 202 x 163mm 11.4 x 8.0 x 6.4"	290 x 202 x 163mm 11.4 x 8.0 x 6.4"	500 x 340 x 252mm 19.7 x 13.4 x 10.0"
Weight	1.6kg / 3.5lbs	2.4kg / 5.3lbs	12.5kg / 27.6lbs
Front Cover Fastener	4 x Captive Phillips Screw 12G (Torque 1.8 Nm)	4 x Captive Phillips Screw 12G (Torque 1.8 Nm)	Double bit key for locking
Ground Connection Type	Internal busbar with M4 screw, spring washer and nut	Internal busbar with M4 screw, spring washer and nut	Internal busbar with M6 ring terminal, spring washer and nut
Current Terminal Type and Max Size	M6 Ring terminal	M6 Ring terminal	M6 Ring terminal
Input Cable Gland Size	1 x M25 (Torque 8 Nm)	2 x M25 (Torque 8 Nm)	3 x M40 (Torque 8 Nm)
Output Cable Gland Size	1 x M25 (Torque 8 Nm)	2 x M25 (Torque 8 Nm)	5 x M25 (Torque 8 Nm)

(1): This equipment complies with EN/IEC 61000-3-11. It is the responsibility of the installer or user of the equipment to ensure, by consultation with the distribution network operator if necessary, that the equipment is connected only to a supply with a system impedance less than or equal to Zmax.

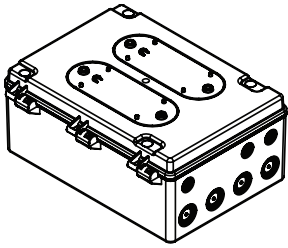
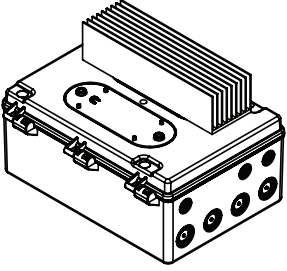
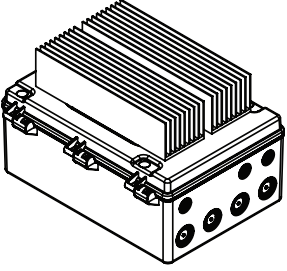
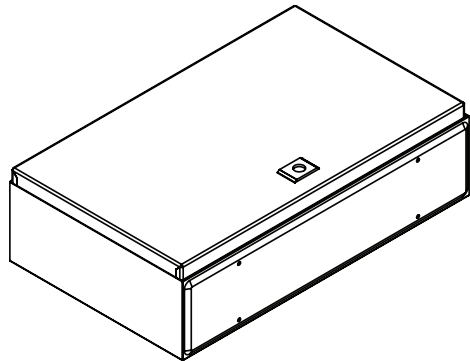
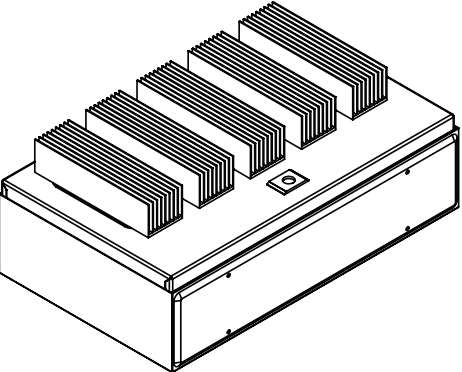
Please see heater types and load distribution on page 15 for maximum loads per channel.

PRODUCT SPECIFICATIONS - ECLIPSE PENDANT

Model	Smart-Heat Control Eclipse Pendant 1 CH	Smart-Heat Control Eclipse Pendant 5 CH
Part Number	BH8380051	BH8380055
Number of Heaters per Controller	1	5
Supply	a.c. 50-60Hz	a.c. 50-60Hz
Supply Phase	Single Phase	3 Phase 3 Wire or 3 Phase 4Wire
Voltage	220-240V 200-208V (Japan and North America Only)	220-240V 200-208V (Japan and North America Only)
Operating Capacity per channel	4kW	6kW (30A max)
Rated Impulse Voltage	2500V	2500V
Operating Temperature Range	-20°C to +30°C / -4°F to +86°F	-20°C to +30°C / -4°F to +86°F
Non-Operating Temperature Range	-30°C to +70°C / -22°F to +158°F	-30°C to +70°C / -22°F to +158°F
Operating Humidity Range	0-85%	0-85%
Protection Rating	IP54	IP54
Dimensions	290x202x112mm / 11.4x8.0x4.4"	500 x 340 x 252mm / 19.7 x 13.4 x 10.0"
Weight	1.6kg / 3.5lbs	15kg / 33.1lbs
Front Cover Fastener	4 x Captive Phillips Screw 12G (Torque 1.8 Nm)	Double bit key for locking
Ground Connection Type	Internal busbar with M4 screw, spring washer and nut	Internal busbar with M6 ring terminal, spring washer and nut
Current Terminal Type	Screw terminal	M6 Ring terminal
Current Terminal Size (Max)	6mm ² / 10 AWG	-
Input Cable Gland Size	1 x M25 (Torque 8 Nm)	3 x M40 (Torque 8 Nm)
Output Cable Gland Size	1 x M25 (Torque 8 Nm)	5 x M25 (Torque 8 Nm)

PACKAGING CONTENTS

PACKAGING CONTENTS

<p>Controller</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Smart-Heat Control On/Off 1 CH Smart-Heat Control On/Off 2 CH Smart-Heat Control Eclipse Pendant 1 CH</p> </div> <div style="text-align: center;">  <p>Smart-Heat Control Dimmer 1 CH</p> </div> <div style="text-align: center;">  <p>Smart-Heat Control Dimmer 2 CH</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Smart-Heat Control On/Off 5 CH</p> </div> <div style="text-align: center;">  <p>Smart-Heat Control Dimmer 5 CH Smart-Heat Control Eclipse Pendant 5 CH</p> </div> </div>
<p>Instruction Manual</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div data-bbox="438 1276 742 1702"> </div> <div data-bbox="917 1388 1069 1545"> </div> </div> <p style="text-align: center; margin-top: 10px;">SCAN FOR LATEST MANUAL</p>
<p>Accessory Bag</p>	<p>See next page for accessory bag contents</p>

PACKAGING CONTENTS

Model	Accessory Bag Contents
On/Off 1-Channel & On/Off 2-Channel & Eclipse Pendant 1-Channel	2 x M25 Cable Gland (4 x supplied with 2-Channel) 5 x M4x10 Screw 5 x Spring Washer
Dimmer 1-Channel & Dimmer 2-Channel	2 x M25 Cable Gland (4 x supplied with 2-Channel) 4 x Plastic Washer (8 x supplied with 2-Channel) 4 x M6 Ring Terminal (8 x supplied with 2-Channel) 5 x M4 Screw 5 x Spring Washer 2x Jumper Wire M6 Ring to M6 Ring (2-Channel only)
On/Off 5-Channel & Dimmer 5-Channel & Eclipse Pendant 5-Channel	1 x Doublebit Key 4 x Mounting Bracket & Screws 1 x L-Shape Busbar 3 x Straight Busbar 16 x M6 2.5-4mm ² / AWG 12-14 Ring Terminal 3 x M6 4-6mm ² / AWG 10-12 Ring Terminal 4 x M6 10-16mm ² / AWG 6-8 Ring Terminal 1x M40 Cable Gland 5x M25 Cable Gland 3x M16 Cable Gland (8 x supplied with Eclipse Pendant) 15x Spring Washer 1 x Jumper Wire for BMS

TOOLS/PARTS REQUIRED

- 4 x Fasteners appropriate for mounting
(1CH+2CH models - 4.5mm / 11/64" diameter holes)
(5CH models - 7.0mm / 17/64" diameter holes)
- [Dimmer models only] Crimping tool.
- [Dimmer models only] 10mm / 7/16 socket.
- Extra cable glands to suit desired wiring.

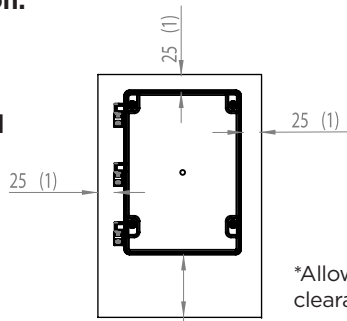
INSTALLATION INSTRUCTIONS

INSTALLATION CLEARANCES

⚠ IMPORTANT

- Ensure that the controller is installed with minimum clearance specified on all sides.
- The stated clearance to combustible materials represents surface temperature of 65°C (117°F) above room temperature. Building material with a low heating tolerance (such a plastic, vinyl siding, canvas, tri-ply etc.) may subject to degradation at lower temperature. It is the installer's responsibility to assure that adjacent materials are protected.
- For dimmer models ensure heat sinks have sufficient clearances and are not obstructed or contacted.
- For confined spaces, ensure ventilation is adequate to maintain ambient temperatures below 30°C (86°F) (Otherwise forced ventilation of area is required)
- Installing the control in an enclosed space will interfere with bluetooth/wi-fi communication and reduce the range of operation.

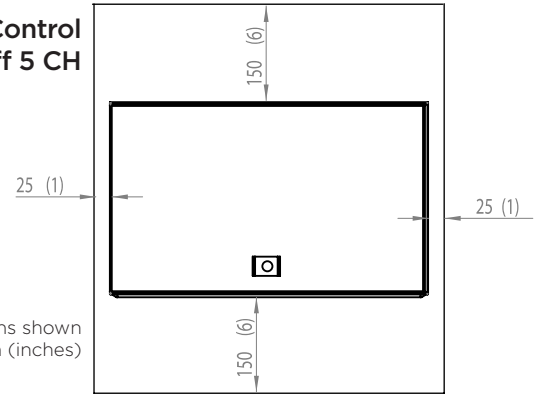
Smart-Heat Control
On/Off 1 CH and 2 CH
Smart-Heat Control
Pendant Eclipse 1 CH



*Dimensions shown in mm (inches)

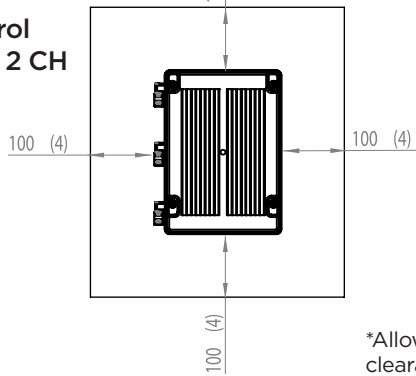
*Allow sufficient clearance for cabling.

Smart-Heat Control
On/Off 5 CH



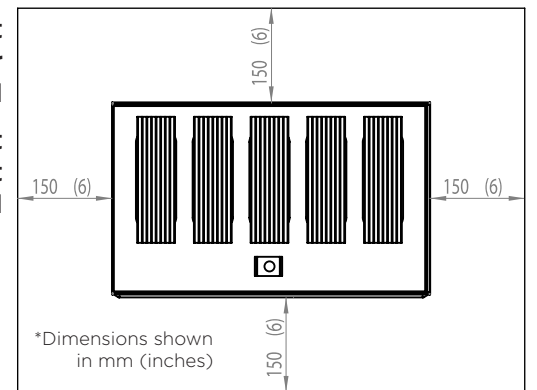
*Dimensions shown in mm (inches)

Smart-Heat Control
Dimmer 1 CH and 2 CH



*Allow sufficient clearance for cabling.

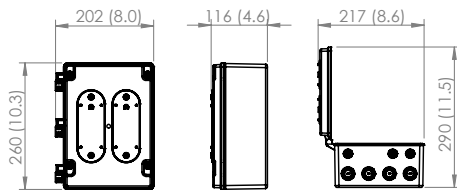
Smart-Heat Control Dimmer
5 CH
Smart-Heat Control Pendant
Eclipse 5 CH



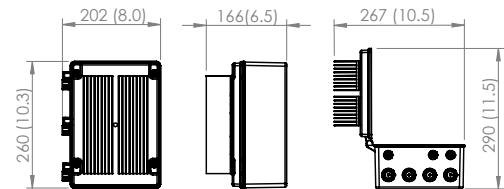
*Dimensions shown in mm (inches)

PRODUCT DIMENSIONS

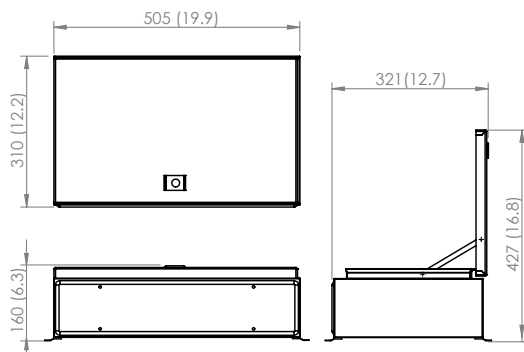
Smart-Heat Control On/Off 1 CH
Smart-Heat Control On/Off 2 CH
Smart-Heat Control Pendant Eclipse 1 CH



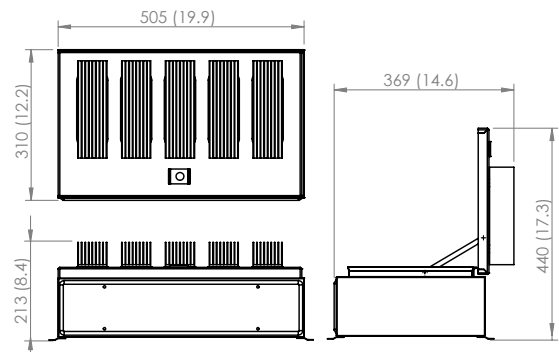
Smart-Heat Control Dimmer 1 CH
Smart-Heat Control Dimmer 2 CH



Smart-Heat Control On/Off 5 CH



Smart-Heat Control Dimmer 5 CH
Smart-Heat Control Eclipse Pendant 5 CH



MOUNTING INSTRUCTIONS

The Smart-Heat Control operates using a smart device with internet connectivity and a Bluetooth or Wi-Fi connection. The mounting location of the Smart-Heat Control must be selected to ensure it is within range for the selected communication method. Before mounting the Smart-Heat Control, complete the following checklist to ensure your mounting location is suitable.

MOUNTING LOCATION CHECKLIST

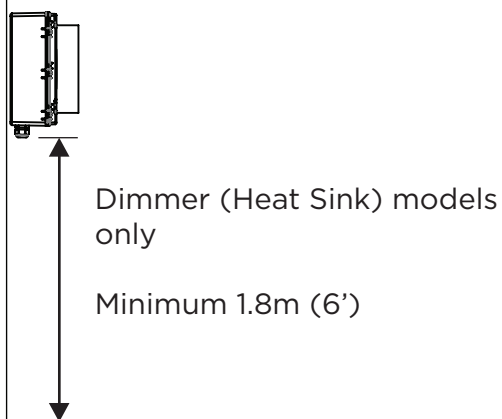
- [Bluetooth only] Mounting location is within 10m (30ft) of the heater location.
- [Wi-Fi only] Mounting location is within 10m (30ft) of a router (or smart device indicates a signal strength of 3 bars at the mounting location).
- Heat Sink [1+2 Channel] Models require 100mm (4") clearance on all sides of the controller.
- Heat Sink [5 Channel] Models require 150mm (6") clearance on all sides of the controller.
- Mounting location minimum height of 1.8m (6') FFL/AFF for ALL heat Sink (Dimmer) models.
- Mounting location will not subject controller to temperatures outside of -20°C to 30°C (-4°F to 86°F) during operation or -30°C to 70°C (-22°F to 158°F) during unused periods. (Otherwise forced ventilation of area is required)
- Mounting location is at least 1m (3ft) away from connected heaters.
- Mounting location is suitable for installation in the correct mounting orientation (refer suitable mounting positions below).

MOUNTING POSITIONS

Dimmer controller models operate with a heat sink that can reach temperatures of 85C (185F) and must be installed out of reach. The Dimmer controller models require a minimum 1.8m (6') clearance height to ensure out of reach of personnel. Controllers are not servicable and must only be opened by licenced electrical contractors.

On/Off models do not have a height clearance requirement.

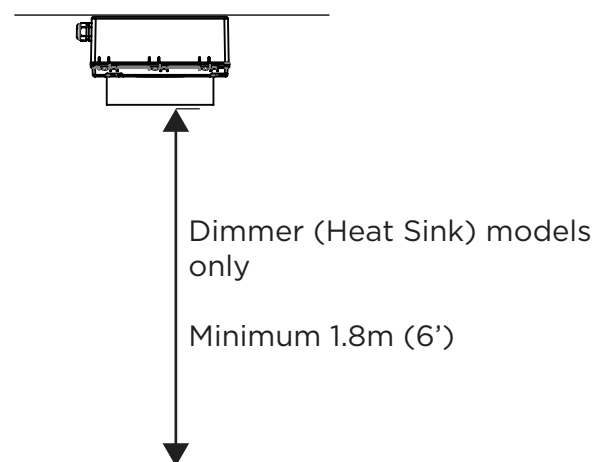
Wall Mounting



Wall Mounting suitable for below models:

- Smart-Heat Control On/Off 1 CH
- Smart-Heat Control On/Off 2 CH
- Smart-Heat Control On/Off 5 CH
- Smart-Heat Control Dimmer 1 CH
- Smart-Heat Control Dimmer 2 CH
- Smart-Heat Control Dimmer 5 CH
- Smart-Heat Control Eclipse Pendant 1 CH
- Smart-Heat Control Eclipse Pendant 5 CH

Ceiling Mounting



Ceiling Mounting suitable for below models:

- Smart-Heat Control On/Off 1 CH
- Smart-Heat Control On/Off 2 CH
- Smart-Heat Control Dimmer 1 CH
- Smart-Heat Control Dimmer 2 CH
- Smart-Heat Control Eclipse Pendant 1 CH

Ceiling Mounting **not** suitable for below models:

- Smart-Heat Control On/Off 5 CH
- Smart-Heat Control Dimmer 5 CH
- Smart-Heat Control Eclipse Pendant 5 CH

MOUNTING INSTRUCTIONS

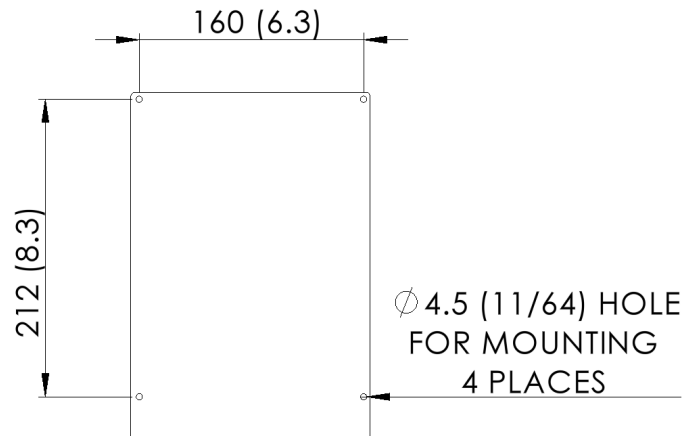
PROCEDURE for models:

- Smart-Heat Control On/Off 1 CH
- Smart-Heat Control On/Off 2 CH
- Smart-Heat Control Eclipse Pendant 1 CH
- Smart-Heat Control Dimmer 1 CH
- Smart-Heat Control Dimmer 2 CH

IMPORTANT

Refer to the applicable controller weight on pages 7-8 and for wall mounting, ensure an appropriate length for the screw fixings.

1. Ensure control is disconnected from power.
2. Mark mounting hole centers on ceiling or wall.
3. Open front cover of control and attach with appropriate fasteners (not supplied). Ensure the control is firmly attached. Note the maximum compatible size is 8g/4.2mm screws.
4. Complete electrical wiring as per pages 14-23.
5. Close front cover with supplied screws with torque of 1.8 Nm (1.4 ft-lbs)



*Dimensions shown in mm (inches)

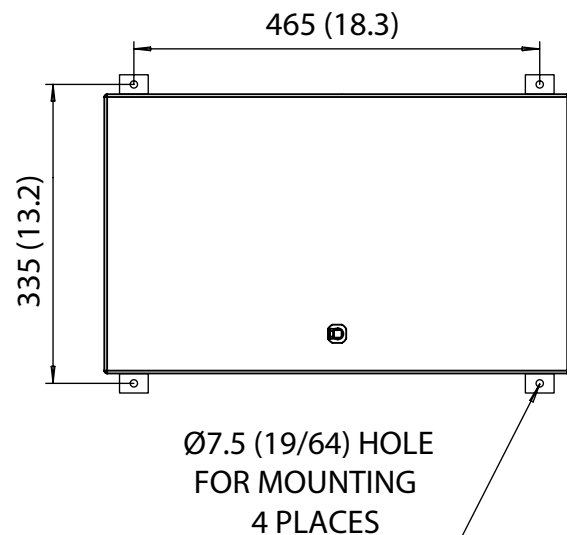
PROCEDURE for models:

- Smart-Heat Control On/Off 5 CH
- Smart-Heat Control Dimmer 5 CH
- Smart-Heat Control Eclipse Pendant 5 CH

IMPORTANT

Refer to the applicable controller weight on pages 7-8 and for wall mounting, ensure an appropriate length for the screw fixings.

1. Ensure control is disconnected from power.
2. Mark mounting hole centers on ceiling or wall.
3. Open front cover of control and attach with appropriate fasteners (not supplied). Ensure the control is firmly attached.
4. Complete electrical wiring as per pages 21-25.
5. Close front cover with supplied key.



*Dimensions shown in mm (inches)

IMPORTANT NOTES AND WARNINGS



WARNING

This control **MUST** be installed by an authorized/licenced person. Do not carry out installation or assembly procedure while electrical power is switched on.



DANGER

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.



IMPORTANT

Check the heater types and load distribution tables for correct loads imposed by heaters and ensure maximum load is not exceeded for each controller channel.

Check the heater labels for the correct voltage and wattage to ensure the power source meets the heater's requirements.

Ensure all circuits are labelled for ease of identification. Note the installation process will require you to name each appliance and assign each appliance to a channel number.

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.

The supply circuit must include an isolation switch and/or circuit breaker in accordance with local electrical regulations. In the US, a 2 pole isolation switch and/or circuit breaker must be installed for 2 phase electrical supplies. Under NEC code heater appliances are considered continuous load and 125% overrating applies to electrical circuit design.

OVERCURRENT PROTECTION: The outputs are **NOT** protected against short circuits or overcurrents, which can damage the product. Overcurrent or earth leakage protection devices must be installed. It is the responsibility of the licensed electrical contractor or technician to ensure supply wiring and protection devices on the circuit are installed to meet local electrical rules. Under NEC code, overcurrent devices are to be installed between controller and heater if maximum supply load exceeds 50A.

THERMAL CUT-OFF: The Bromic Smart-Heat Control is fitted with thermal protection. All outputs will automatically cut-off should the temperature main circuit board, relay board for on/off models, or SSR for dimmer models exceed 80°C (176°F). When this occurs, outputs can be manually turned back on after the temperature of the components has reduced to below 75°C (167°F).

HEATER TYPES & LOAD DISTRIBUTION

For On/Off and Dimmer models, use the tables below to determine the channel capacity and ensure that the total connected load does not exceed maximum channel rating. For Smart-Heat Control Eclipse Pendant models, only install one Eclipse Pendant per controller.

Ensure all circuits are labelled for ease of identification. Note the installation process will require you to name each appliance and assign each appliance to a channel number.

Compatibility and load distribution for Bromic Electric Heaters:

Step 1 - Check Controller Capacity (Values per Channel)		
Maximum Power	Supply Voltage (AC 50-60Hz)	Maximum Load
6000W	200V	30A
	208V	28.5A
	220-240V	25A
	277V	21.5A

Step 2 - Check Heater Label

Check the rating label on your heater for the power and supply voltage. This information combined with Step 3 will determine the connected load.

Step 3 - Compare Heater Load to Channel Capacity (1 Element Heaters)		
Heater Power	Supply Voltage (AC 50-60Hz)	Maximum Heater Load
2000W	200V	10A
	208V	9.5A
	220-240V	8A
	277V	7A
2300W	200V	11.5A
	208V	11A
	220-240V	9.5A
3000W	200V	15A
	208V	14A
	220-240V	12.5A
	277V	10.5A
3400W	200V	17A
	208V	16A
	220-240V	14A

Note Bromic electric heaters are a resistive load and usage will vary by site. It is recommended that heater's operate for an extensive time (i.e. continuous load).

If you intend to control two elements from a single heater independently, refer to the element loads below, as well as applicable heater instruction manual for wiring diagrams. If this is not the case simply refer to the total appliance load listed below.

Step 3 - Continued ... (2 Element Heaters)		
Heater Power	Supply Voltage (AC 50-60Hz)	Maximum Appliance Load
4000W (2 elements)	200V	Element 1: 10A Element 2: 10A Total: 20A
	208V	Element 1: 9.5A Element 2: 9.5A Total: 19A
	220-240V	Element 1: 8A Element 2: 8A Total: 16.5A
	277V	Element 1: 7A Element 2: 7A Total: 14A
4500W (2 elements)	200V	Element 1: 7.5A Element 2: 15A Total: 22.5A
	208V	Element 1: 7A Element 2: 14A Total: 21.5A
	220-240V	Element 1: 12.5A Element 2: 6A Total: 18.5A
6000W (2 elements)	200V	Element 1: 15A Element 2: 15A Total: 30A
	208V	Element 1: 14A Element 2: 14A Total: 28.5A
	220-240V	Element 1: 12.5A Element 2: 12.5A Total: 25A
	277V	Element 1: 10.5A Element 2: 10.5A Total: 21.5A

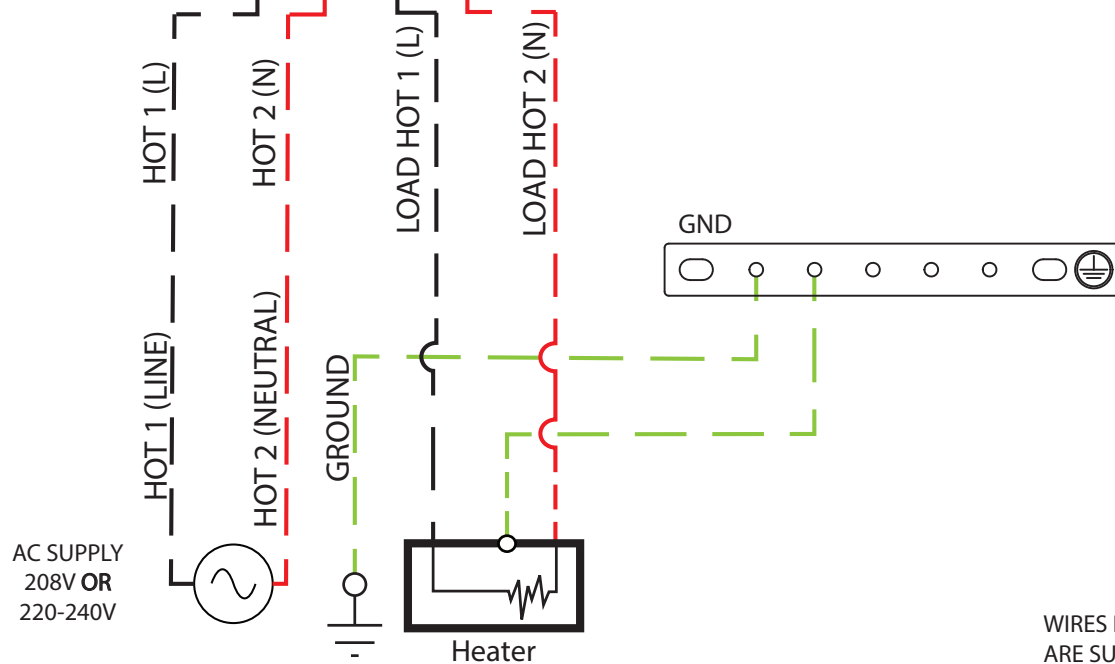
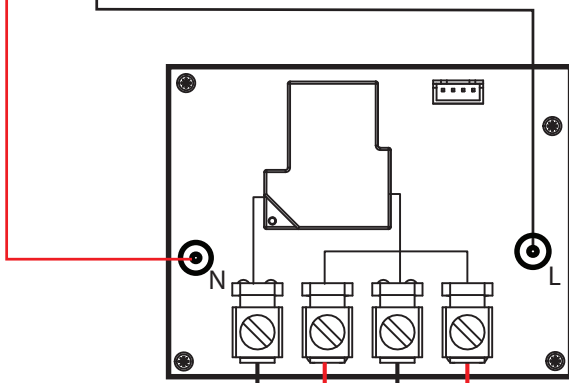
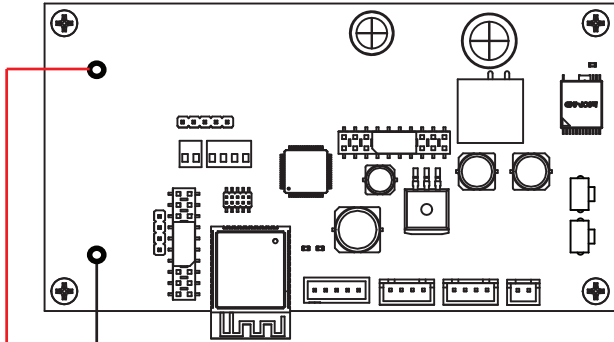
**Load distribution for applicable Bromic gas heaters
(Only compatible with Smart-Heat Control On/Off models)**

Supply Voltage (AC 50-60Hz)	Load produced per Heater	Maximum Load per Control Channel
100-127V	1A	10A

WIRING DIAGRAMS - ON/OFF MODELS

WIRING DIAGRAM FOR SMART-HEAT CONTROL ON/OFF 1CH

- Connect power source and heater to screw terminals as displayed with a torque of 1.3Nm (1ft-lbs). The terminal size is 10mm² / 8AWG.
- Connect ground to internal busbar with fasteners provided. Tighten with max torque 3Nm (2.22 ft-lbs).
- Front cover screw to be tightened with torque of 1.7Nm (1.26 ft-lbs).
- Note diagrams are illustrated with US conventions (IEC conventions).
- The supply circuit must include an isolation switch and/or circuit breaker in accordance with local electrical regulations. In the US, a 2 pole isolation switch and/or circuit breaker must be installed for 2 phase electrical supplies.a



AC SUPPLY
208V OR
220-240V

Heater

WIRES DENOTED BY DASHED LINES
ARE SUPPLIED BY THE INSTALLER

⚡ WARNING
Control **MUST** be permanently
installed and hard wired by an
authorized/licensed electrical
technician.

⚠ IMPORTANT
The maximum current
rating for each terminal
is 30A

IN: Power supply cable (Provided by installer)

Power supply voltage and capacity must be confirmed to suit rating of heaters connected to controller.

OUT: Power cable from heater

Check the heater type, rating, load distribution, and the maximum amperage capacity per controller channel (6kW per channel/refer to page 15 of manual).

Tighten cable glands with torque of 8Nm (6 ft-lbs).

WIRING DIAGRAM FOR SMART-HEAT CONTROL ON/OFF 2CH

- Connect power source and heater to screw terminals as displayed with a torque of 1.3Nm (1ft-lbs). The terminal size is 10mm² / 8AWG.
- Connect ground to internal busbar with fasteners provided. Tighten with max torque 3Nm (2.22 ft-lbs).
- Front cover screw to be tightened with torque of 1.7Nm (1.26 ft-lbs).
- Note diagrams are illustrated with US conventions (IEC conventions).
- Channel 1 must be wired to power the main circuit board.
- The supply circuit must include an isolation switch and/or circuit breaker in accordance with local electrical regulations. In the US, a 2 pole isolation switch and/or circuit breaker must be installed for 2 phase electrical supplies.



WARNING

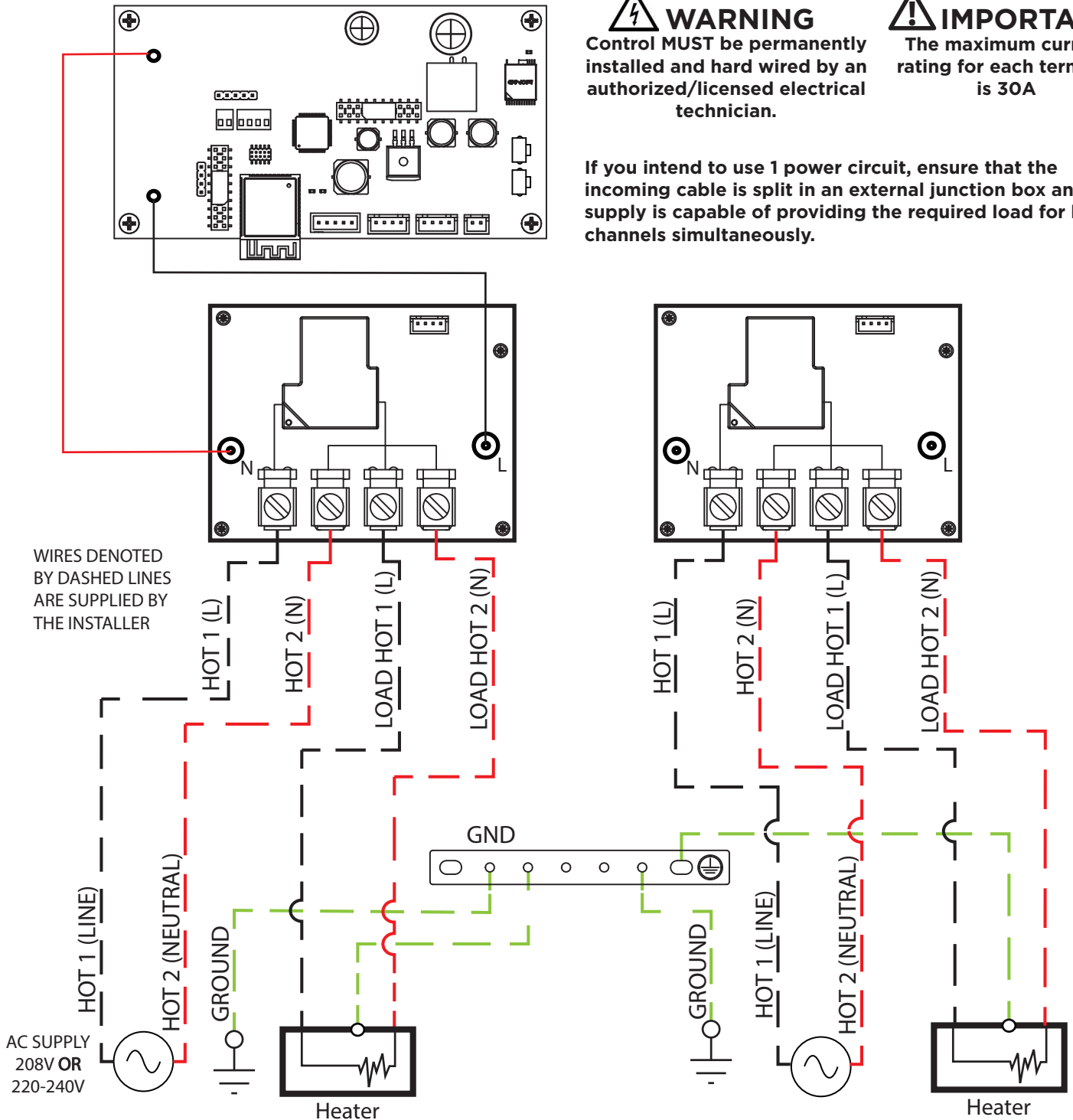
Control **MUST** be permanently installed and hard wired by an authorized/licensed electrical technician.



IMPORTANT

The maximum current rating for each terminal is 30A

If you intend to use 1 power circuit, ensure that the incoming cable is split in an external junction box and the supply is capable of providing the required load for both channels simultaneously.



IN: Power supply cable (Provided by installer)

Power supply voltage and capacity must be confirmed to suit rating of heaters connected to controller.

OUT: Power cable from heater

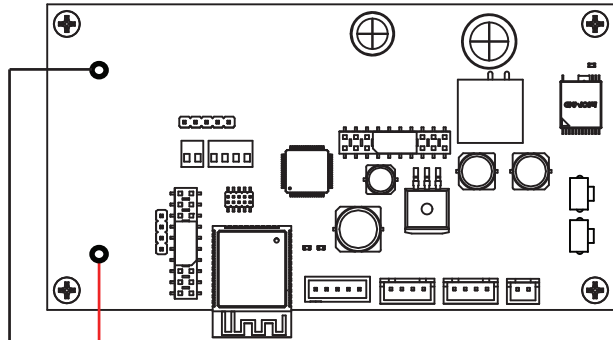
Check the heater type, rating, load distribution, and the maximum amperage capacity per controller channel (6kW per channel/refer to page 15 of manual).

Tighten cable glands with torque of 8Nm (6 ft-lbs).

WIRING DIAGRAMS - DIMMER MODELS

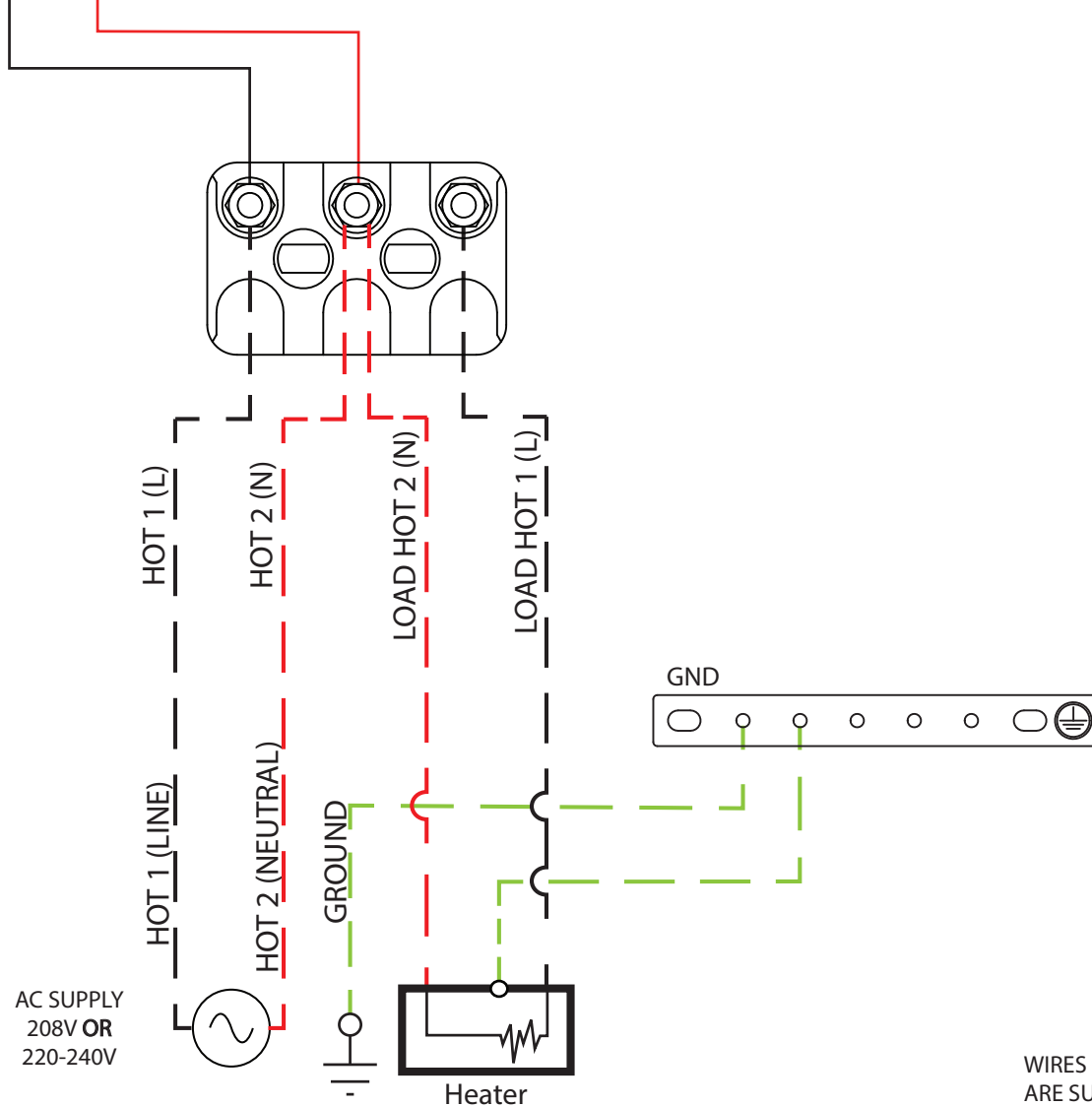
WIRING DIAGRAM FOR SMART-HEAT CONTROL DIMMER 1CH

- Connect power source and heater to stud using M6 ring terminals as displayed. The ring terminals must be UL certified and tightened to 6-7Nm (4.5-5.2 ft-lbs).
- Connect ground to internal busbar with fasteners provided. Tighten with max torque 3Nm (2.22 ft-lbs).
- Front cover screw to be tightened with torque of 1.7Nm (1.26 ft-lbs).
- Note diagrams are illustrated with US conventions (IEC conventions).
- The supply circuit must include an isolation switch and/or circuit breaker in accordance with local electrical regulations. In the US, a 2 pole isolation switch and/or circuit breaker must be installed for 2 phase electrical supplies.



⚡ WARNING
Control **MUST** be permanently installed and hard wired by an authorized/licensed electrical technician.

⚠ IMPORTANT
The maximum current rating for each terminal is 30A



WIRES DENOTED BY DASHED LINES ARE SUPPLIED BY THE INSTALLER

IN: Power supply cable (Provided by installer)

Power supply voltage and capacity must be confirmed to suit rating of heaters connected to controller.

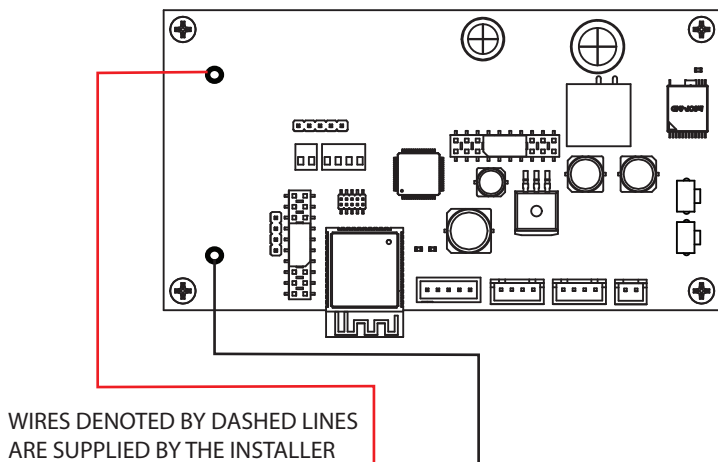
OUT: Power cable from heater

Check the heater type, rating, load distribution, and the maximum amperage capacity per controller channel (6kW per channel/refer to page 15 of manual).

Tighten cable glands with torque of 8Nm (6 ft-lbs).

WIRING DIAGRAM FOR SMART-HEAT CONTROL DIMMER 2CH

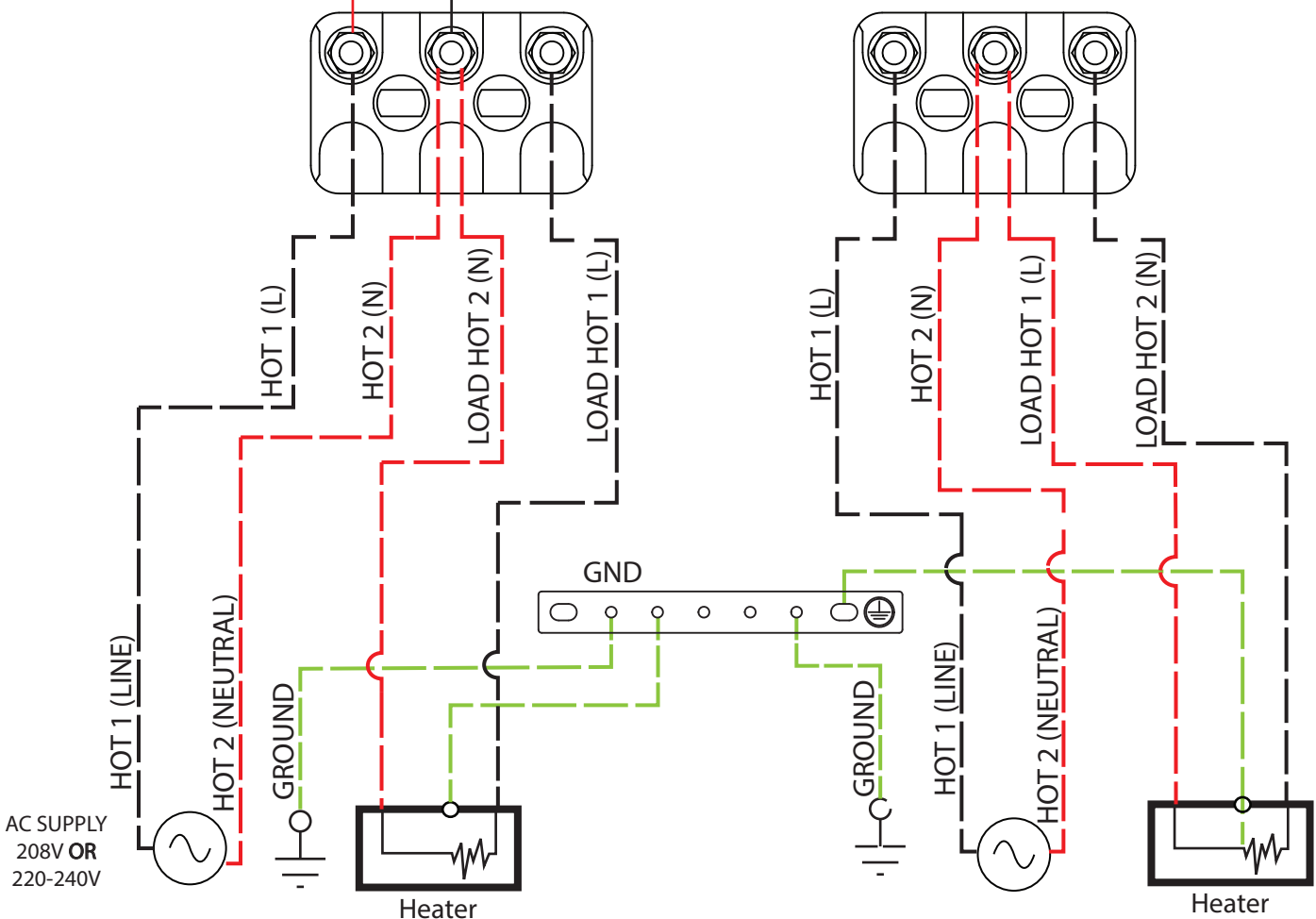
- Connect power source and heater to stud using M6 ring terminals as displayed. The ring terminals must be UL certified and tightened to 6-7Nm (4.5-5.2 ft-lbs).
- Connect ground to internal busbar with fasteners provided. Tighten with max torque 3Nm (2.22 ft-lbs).
- Front cover screw to be tightened with torque of 1.7Nm (1.26 ft-lbs).
- Note diagrams are illustrated with US conventions (IEC conventions).
- Channel 1 must be wired to power the main circuit board.
- The supply circuit must include an isolation switch and/or circuit breaker in accordance with local electrical regulations. In the US, a 2 pole isolation switch and/or circuit breaker must be installed for 2 phase electrical supplies.



⚡ WARNING
Control **MUST** be permanently installed and hard wired by an authorized/licensed electrical technician.

⚠ IMPORTANT
The maximum current rating for each terminal is 30A

If you intend to use 1 power circuit, ensure that the incoming cable is split in an external junction box and the supply is capable of providing the required load for both channels simultaneously.



IN: Power supply cable (Provided by installer)

Power supply voltage and capacity must be confirmed to suit rating of heaters connected to controller.

OUT: Power cable from heater

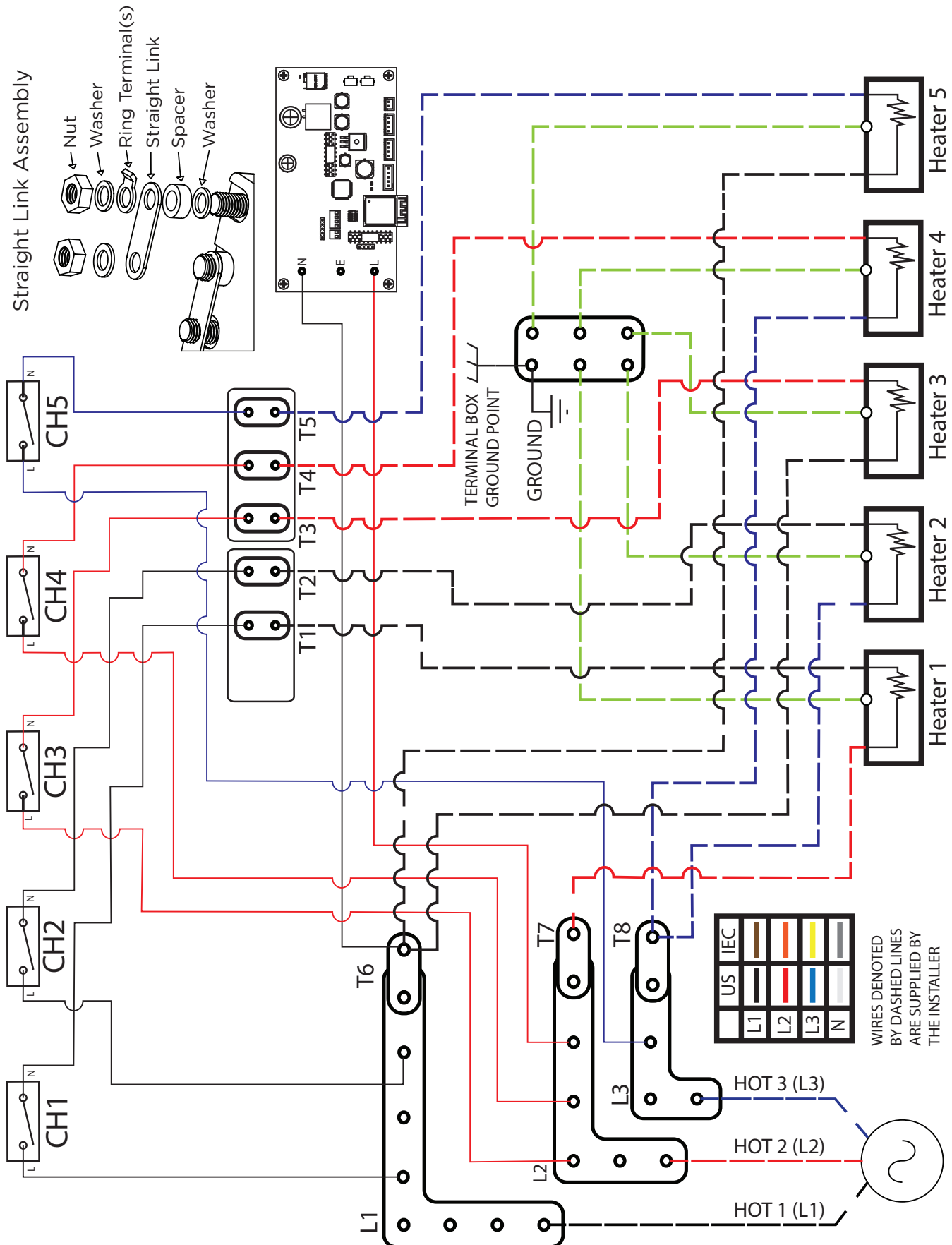
Check the heater type, rating, load distribution, and the maximum amperage capacity per controller channel (6kW per channel/refer to page 15 of manual).

Tighten cable glands with torque of 8Nm (6 ft-lbs).

WIRING DIAGRAM FOR SMART-HEAT CONTROL DIMMER & ON/OFF 5CH

3 Phase/3 Wire - 120/208V Line to Line, 100/200V Line to Line, Split 240V

- Straight links from accessory bag must be fitted by installer for heater connection
- Suitable for North America (120V to 120V), Japan (100V to 100V).

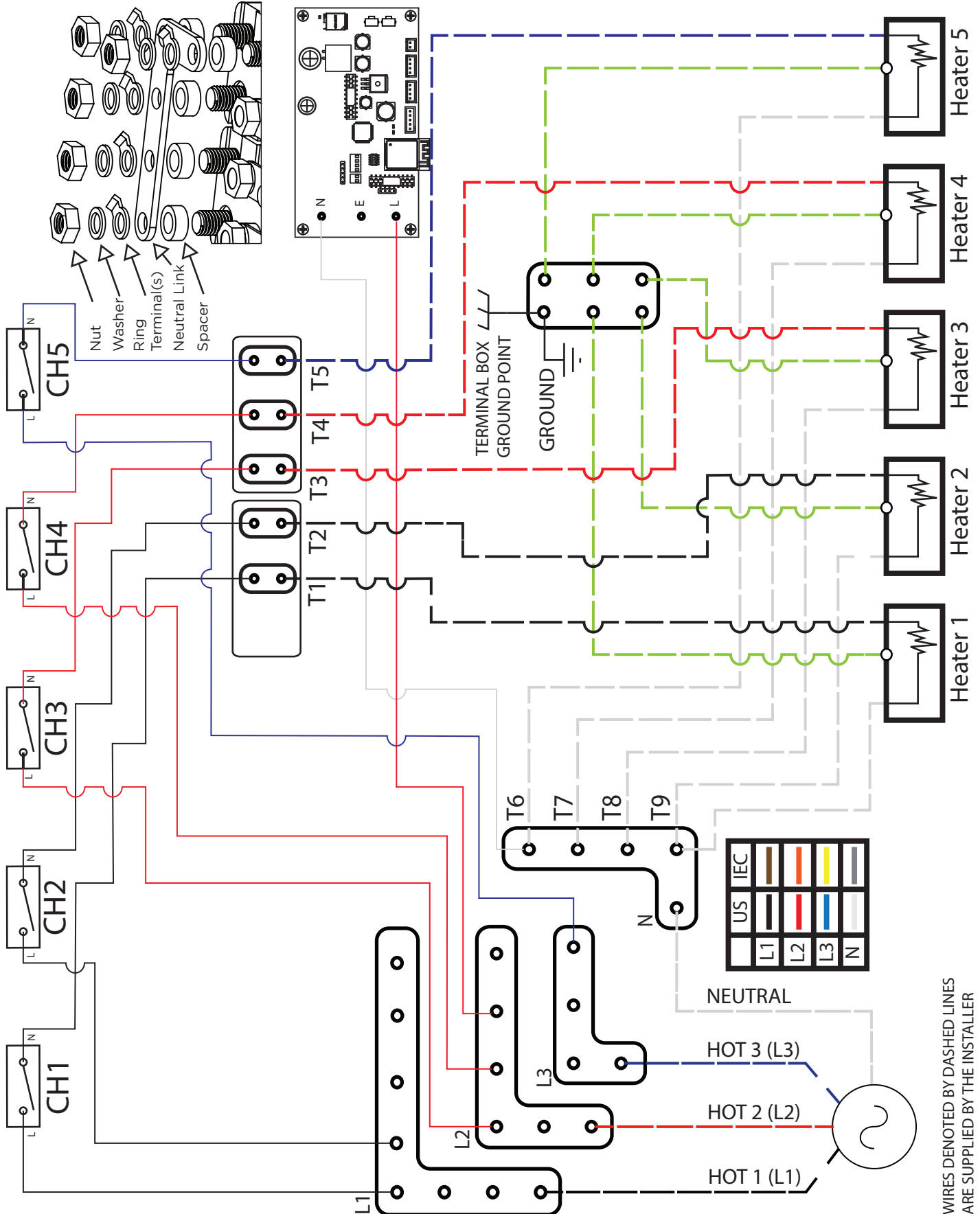


WIRING DIAGRAM FOR SMART-HEAT CONTROL DIMMER & ON/OFF 5CH (Bromic 240V or 277V Heaters)

3 Phase/4 Wire - Line to Neutral Connection - 220/380V, 230/400V, 240/415V, 277/480V

* Neutral connection is made by fitting the L shape link from accessory bag.

* Suitable for: Australia (230/240V) / Europe (220/230/240V) / India (230V) / US (277V)

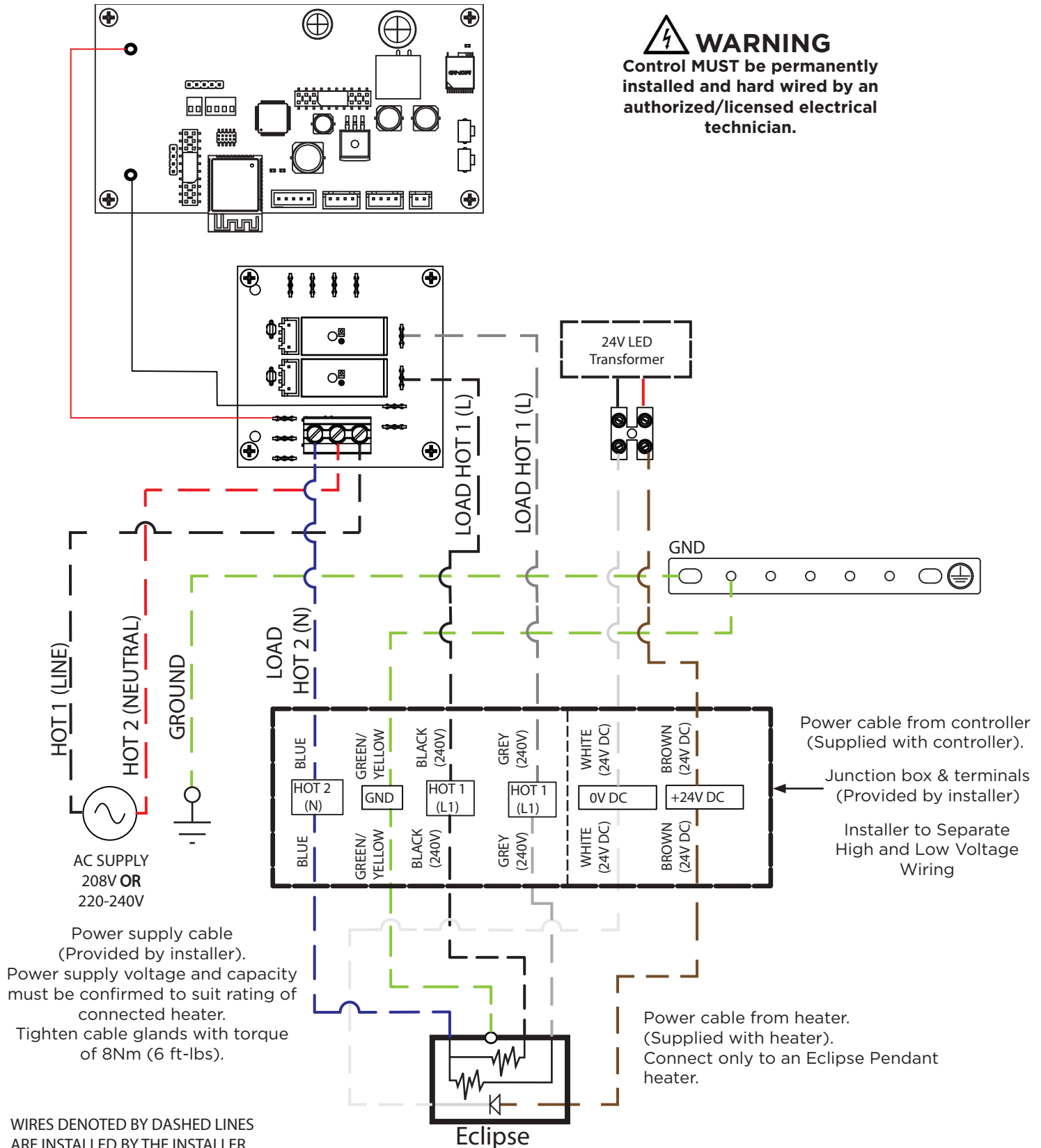


WIRES DENOTED BY DASHED LINES
ARE SUPPLIED BY THE INSTALLER

WIRING DIAGRAMS - ECLIPSE PENDANT MODEL

WIRING DIAGRAM FOR SMART-HEAT CONTROL ECLIPSE PENDANT 1CH

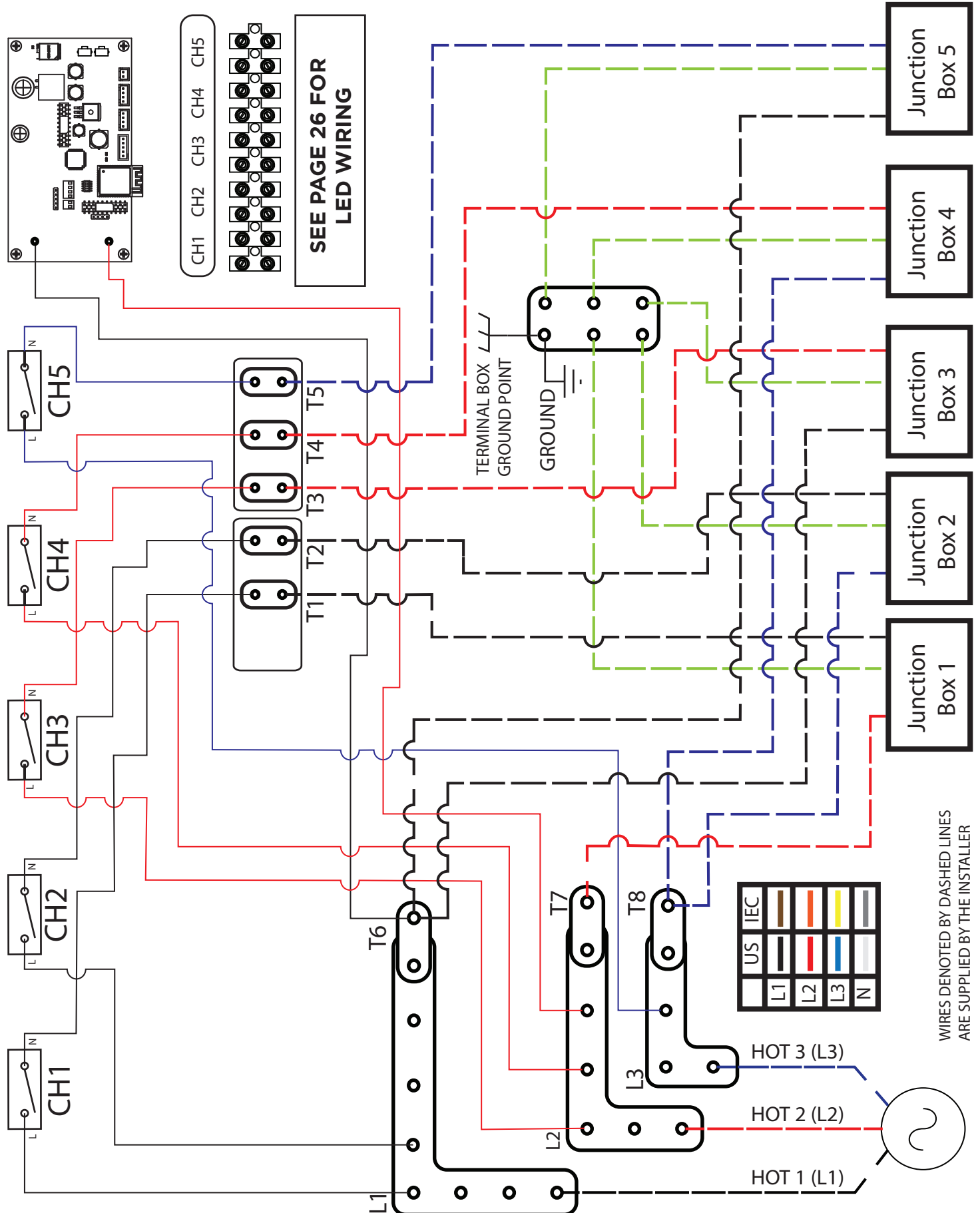
- Connect power source and heater to screw terminals as displayed, with a torque of 0.6Nm (0.4ft-lbs). The terminal size is 6mm² / 10AWG.
- Connect ground to internal busbar with fasteners provided. Tighten with max torque 3Nm (2.22 ft-lbs).
- Front cover screw to be tightened with torque of 1.7Nm (1.26 ft-lbs).
- Note diagrams are illustrated with US conventions (IEC conventions).
- The supply circuit must include an isolation switch and/or circuit breaker in accordance with local electrical regulations. In the US, a 2 pole isolation switch and/or circuit breaker must be installed for 2 phase electrical supplies.



WIRING DIAGRAM FOR SMART-HEAT CONTROL ECLIPSE PENDANT 5CH

3 Phase/3 Wire - 240V Line to Line (No Neutral Connection)

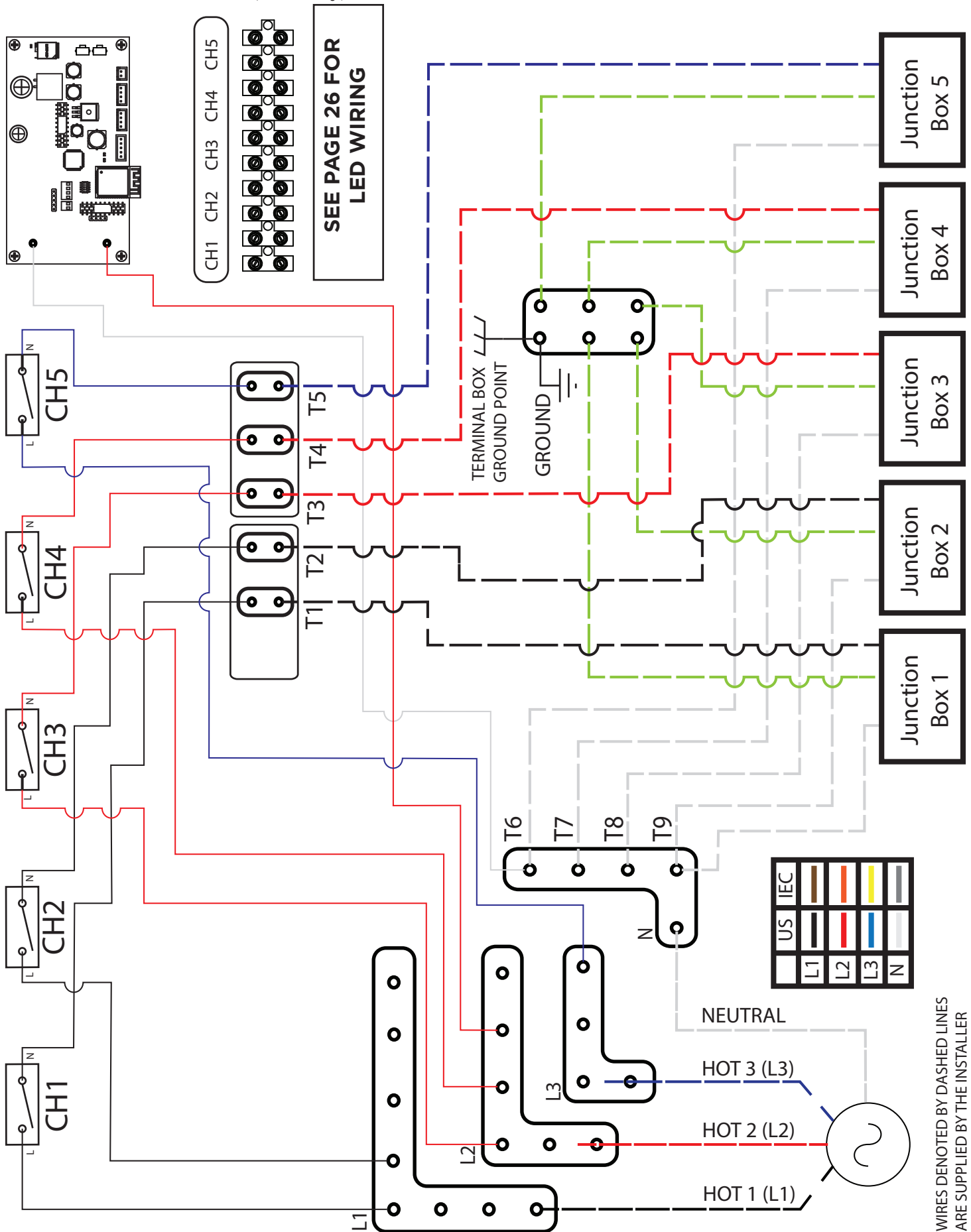
- Straight links from accessory bag must be fitted by installer for heater connection
- Suitable for North America (120V - 120V)



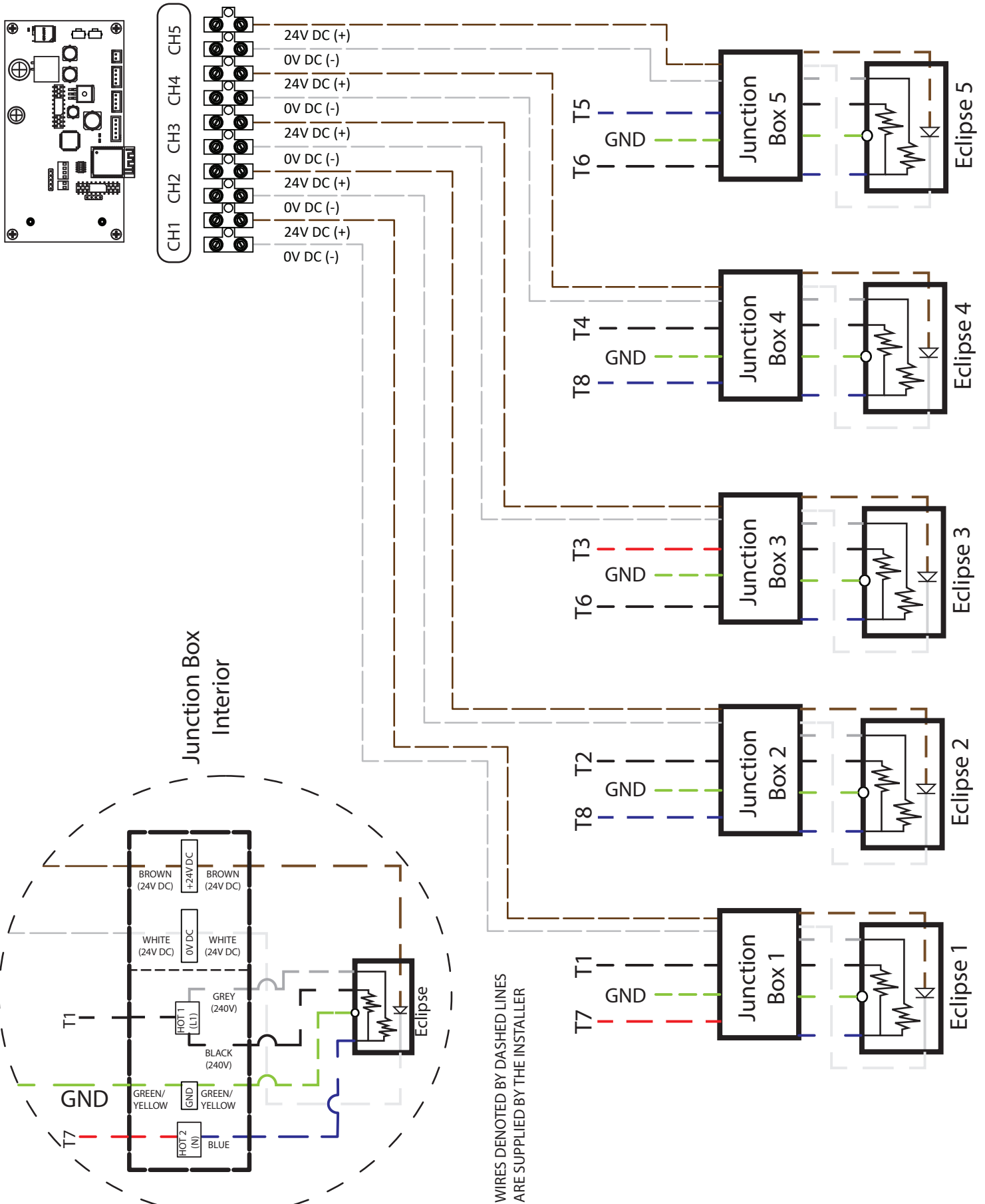
WIRING DIAGRAM FOR SMART-HEAT CONTROL ECLIPSE PENDANT 5CH

3 Phase/4 Wire - Line to Neutral Connection 240V

- * Neutral connection is made by fitting the L shape link from accessory bag.
- * Suitable for North America (240 Only)



WIRING DIAGRAM FOR SMART-HEAT CONTROL ECLIPSE PENDANT 5CH JUNCTION BOX & LED WIRING



OPERATING INSTRUCTIONS

APP SETUP

Download the Bromic Smart-Heat App from the Apple App Store or Google Play Store. When opened, the Bromic Smart-Heat App will prompt you to register an account before guiding you through the configuration of your site. Note that each Smart-Heat Control requires its own setup. After your site has been configured, you may configure and control multiple controllers.



App Store



Play Store

Initial pairing of a controller must be done using a Bluetooth connection. Therefore, you must remain within 10m of the controller until setup is complete. Bluetooth operation range may vary depending on site conditions and devices, it is recommended to operate within 10m (30ft) of the controller at all times. Wi-Fi communication is the recommended method and will enable additional features not available with a Bluetooth connection.

REGULAR USE

After your site has been configured, you may use the Bromic Smart-Heat App to operate all controllers within the site. If the control is connected to Wi-Fi, you will also gain access to additional features, such as zoning and scheduling the operation of your Bromic heaters. Zones may also be used to reorder your appliances by adding the appliances in the exact order you wish them to be displayed.

The menu may also be used to perform various functions such as:

- Managing site configuration.
- Managing site access with multiple users.
- Viewing heater usage.
- Calculating heating costs.

When a Wi-Fi configured control loses connection to the network, it will automatically revert to a Bluetooth connection until the network connection is restored. This may require a wait time of 3 minutes.

Bluetooth operation is only possible on one smart device at a time. When the app is open on multiple smart devices, the connection will automatically transfer to available devices if the connected device exits the app, closes the app or when the screen is locked.

MAINTENANCE

This control has no serviceable parts inside and, therefore, does not require maintenance after initial installation. It is recommended to ensure your Bromic Smart-Heat App is up to date. If your control is not functioning, please refer to the troubleshooting table in this manual. If your control appears damaged, discontinue use immediately and contact your supplier. An isolation switch or circuit breaker must isolate all live circuits before conducting an inspection or servicing connected appliances.

If issues occur with the operation of the Bromic Smart-Heat App, please refer to the troubleshooting section in this manual. If you are experiencing difficulties with troubleshooting, please refer to the following instructions to reset a Smart-Heat Control using the Bromic Smart-Heat App.

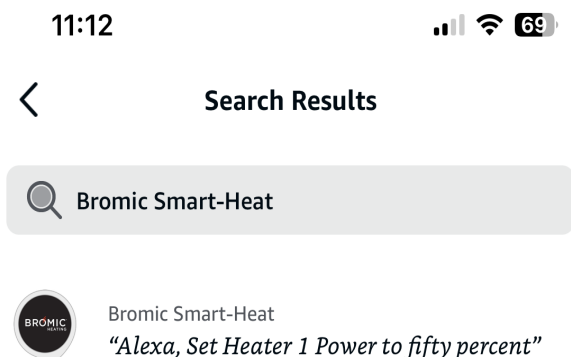
Controller reset – This can only be done using BLE & while connected to the controller. To reset a controller, delete it either from the appliance list or through the site configuration menu. Then, reconfigure the controller onto the site, ensuring that you are within 10m of the controller to maintain Bluetooth connection.

VOICE ACTIVATION

All models of the Bromic Smart-Heat Control are compatible with Amazon Alexa and Google Home. Note: You must already have an Amazon or Google Home account prior to linking your device.

AMAZON ALEXA INSTRUCTIONS

1. Open the Amazon Alexa App and select the 'More' tab.
2. Select 'Skills & Games'
3. Use the search bar to search for 'Bromic Smart-Heat' and select the Bromic Smart-Heat skill displayed in the provided screenshot.
4. Press 'Enable to Use'.
5. Sign into your Bromic App account.
6. Press 'Authorise'.
7. You will then be prompted to set up each heater individually to any rooms you have set up.



Note: The Alexa app will import any groups you have created in the Bromic Smart-Heat app as well as your appliances individually.

Suggested Voice Commands:

- Turn specific appliances on/off or dim a specific appliance to a desired percentage:
eg. "Alexa turn [appliance name] on/off"
eg. "Alexa turn [appliance name] to 50%"
- Turn a group of appliances on/off or dim a zone of appliances to a desired percentage:
eg. "Alexa, turn [group name] on/off"
- [ECLIPSE ONLY] - Turn LEDs on/off or dim LEDs to a desired percentage:
eg. "Alexa, turn [appliance name] lights on/off."
- eg. "Alexa, set [appliance name] lights to 30%."

GOOGLE HOME INSTRUCTIONS

1. Open the Google Home App and select the 'Devices' tab.
2. Select '+ Add'.
3. Press 'Works with Google'.
4. Use the search bar to search for 'Bromic Smart- Heat' and select the option displayed in the provided screenshot.
5. Sign into your Bromic App account.
6. Press "Agree and Link".
7. Add each displayed Bromic appliance to any desired room.

Suggested Voice Commands:

Turning specific appliances no/off or dim to a desired percentage

- "Hey Google, turn [appliance name] on/off."
- "Hey Google, set [appliance name] to 50%."

Turn a group of appliances on/off or dim a zone of appliance to a desired percentage:

- "Hey Google, turn [group name] on/off."
- "Hey Google, set [group name] to 30%."

[ECLIPSE ONLY] - Turn light on/off and set brightness:

- "Hey Google, turn [appliance name] light on/off."
- "Hey Google, set [appliance name] light to 70%."

EXPANSION BOARD INSTALLATION

The Bromic Smart-Heat Control expansion board enables additional connection types like Ethernet and BMS for home automation and Building Management System applications.

For 1-Channel and 2-Channel models the expansion board is an accessory (sold separately). For 5-Channel models the expansion board is included pre-installed with the controller.

The following section outlines the process to install the expansion board for 1-Channel & 2-Channel models. Integration must be performed by a Home Automation Integrator or licensed technician. You must complete the electrical installation on pages 14-26 before installation of the expansion board.



WARNING

This expansion board **MUST** be installed by an authorized/licenced person.



ESD PROTECTION REQUIRED

Ensure when handling, contact is free from electrical static discharge



IMPORTANT

Disconnect power before installing the expansion board.

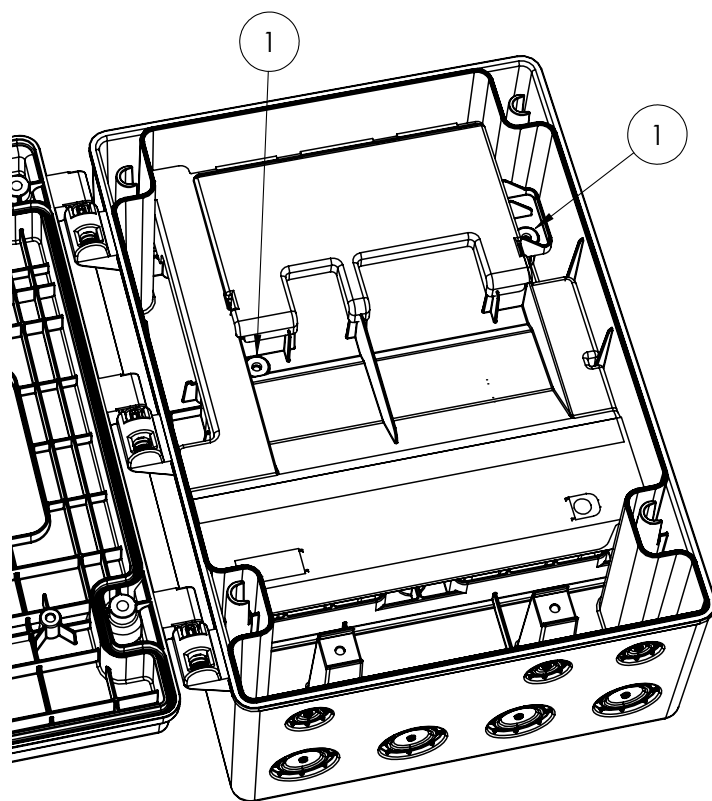
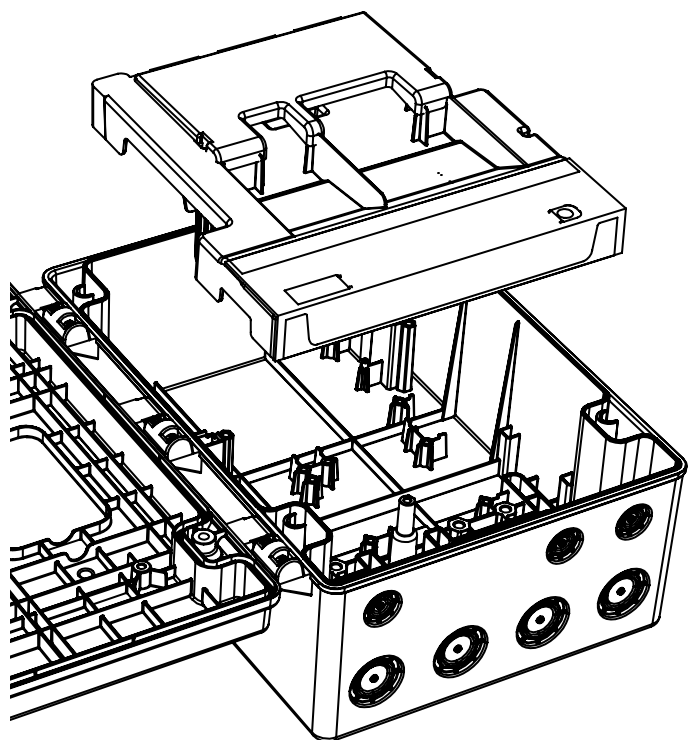


ELECTRICAL SHOCK HAZARD

Incorrect polarity or short circuit will damage the expansion board.

The Bromic Smart-Heat Control expansion board consists of the electronic circuit board and the housing.

1. Disconnect power to the controller.
2. Insert expansion board housing into controller housing using the marked slots and ensure terminals have seated completely.
3. Fasten provided screws into marked holes (1). Maximum torque of 2Nm.
4. Verify that when power is supplied, LEDs on the expansion board turns on.



EXPANSION BOARD CONNECTIONS



IMPORTANT

Disconnect power before making connections to the PCB



ELECTRICAL SHOCK HAZARD.

Incorrect polarity or short circuit will damage the expansion board.

ETHERNET CONNECTION

An ethernet connection is offered for wired connection to a home router or gateway using DHCP (static or dynamic). For 1-Channel and 2-Channel models, after installation of the expansion board, the BMS jumper wire supplied preassembled to the terminal block must be removed for Ethernet to function. For 5-Channel models this step is not required. Then connect a CAT6 ethernet cable to the RJ45 port. The connection must have internet access.

After connection, the front cover may be closed as per mounting instructions. You may then select ethernet as a connection type either through the installation process or through edit site. Selecting an ethernet connection will provide options to specify the IP address type (static or dynamic) and enter a custom DNS.

CONNECTION FOR 0-10VDC - HOME AUTOMATION OR BUILDING MANAGEMENT SYSTEM (BMS) or WALL SWITCH DIMMERS

The expansion board also enables Smart-Heat Controls to operate using:

- a) Home automation or
- b) A Building Management System (BMS) or
- c) A suitable Wall Switch Dimmer (current source type ONLY.)

A BMS connection requires a 0-10VDC input signal from a current source supply.

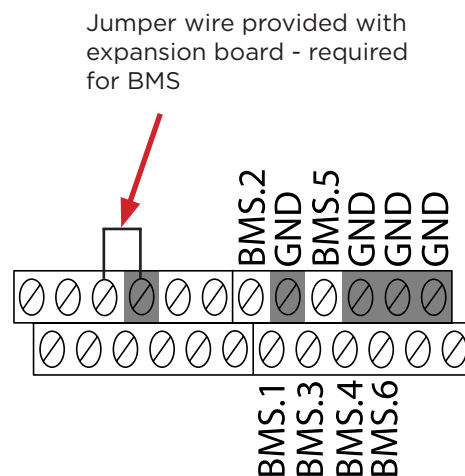
CAT5 or CAT6 cable is recommended and no length limitation. Screw terminal size is 1mm²/16AWG, maximum torque of 0.25Nm. Refer to the provided terminal diagram and corresponding table. For 5-Channel models, the BMS jumper wire must be fitted by installer.

For 1-Channel and 2-Channel models the expansion board must be installed which has the BMS jumper preassembled and must be left connected for BMS to function.

After connection, the front cover may be closed as per mounting instructions.

You may then use your home automation system to control appliances.

Note that when using BMS, the appliances cannot be controlled using the Bromic Smart-Heat App.



Terminal	Controller Type							
	On/Off 1CH	On/Off 2CH	On/Off 5CH	Dimmer 1CH	Dimmer 2CH	Dimmer 5CH	Eclipse Pendant 1CH	Eclipse Pendant 5CH
BMS.1	Channel 1	Channel 1	Channel 1	Channel 1	Channel 1	Channel 1	Heater element 1+2	Pendants 1+2 heaters
BMS.2		Channel 2	Channel 2		Channel 2	Channel 2	LEDs	Pendants 3+4 heaters
BMS.3			Channel 3			Channel 3		Pendant 5 heaters
BMS.4			Channel 4			Channel 4		Pendants 1+2 LEDs
BMS.5			Channel 5			Channel 5		Pendants 3+4 LEDs
BMS.6								Pendant 5 LEDs

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION(S)
App is unresponsive/ frozen	<ol style="list-style-type: none"> 1. Too many requests in a short period of time. 2. App or phone operating system may be out of date/incompatible. 3. Unstable internet connection. 4. Not within the BLE range 	<ol style="list-style-type: none"> 1. Close and reopen Bromic Smart-Heat App. 2. Complete a software update on both smart device and Smart-Heat App. 3. Ensure that there is a strong network connection (3 signal bars). 4. When operating on BLE mode, ensure that user is within 10m (30ft) of the controller.
Cannot connect to controller	<ol style="list-style-type: none"> 1. [Bluetooth communication] Smart device is outside Bluetooth range of the controller 2. [Bluetooth communication] Other user is currently connected to the controller and controlling appliance. 3. [Wi-Fi communication] Controller is outside range of Wi-Fi network. 4. BMS jumper is fitted to expansion board. 5. There is signal interference. 	<ol style="list-style-type: none"> 1. [Bluetooth connection] Operate heaters within 10m (30ft) of controller. 2. [Bluetooth connection] Ensure no other user controlling appliance at the same time. 3. [Wi-Fi connection] Ensure Wi-Fi network is active and controller is within range. 4. Disable BMS mode by removing jumper wire.
Controller is not identifiable during installation	<ol style="list-style-type: none"> 1. Bluetooth is not enabled on user's device. 2. Controller already claimed by another user. 	<ol style="list-style-type: none"> 1. Turn on BLE on user's device. 2. Delete controller from other user's site/account.
Did not receive account activation email.	<ol style="list-style-type: none"> 1. Email is in junk or spam folder. 2. Account was registered with incorrect email or a typo was made whilst registering. 	<ol style="list-style-type: none"> 1. Check junk or spam folder. 2. Attempt to register again with correct email.
Cannot complete installation on WiFi or Ethernet	<p>[WiFi Connection]</p> <ol style="list-style-type: none"> 1. Incorrect SSID or Password. 2. Network is not 2.4GHz 3. Firewall policy not allowing communication. <p>[Ethernet Connection]</p> <ol style="list-style-type: none"> 1. RJ45 port LEDs not indicating 3. Incorrect IP address or settings 2. Firewall policy not allowing communication. 	<p>Check with your IT administrator with the following details:</p> <ol style="list-style-type: none"> 1. WiFi network settings on 2.4GHz. 2. Ethernet connection method and correct address assignments. 3. Firewall policy allows MQTT, NTP and DNS services. Run a firewall bypass test using a SmartPhone Hotspot and configure the controller on this WiFi Hotspot setting. 4. See below for further firewall policy details.
Network Firewall policy not allowing Internet connection	<ol style="list-style-type: none"> 1. WiFi or Ethernet installation fails with error "cannot ping the cloud IP address." 2. Connection fallbacks to Bluetooth and cannot restore WiFi or Ethernet connection. 	<p>Your IT administrator must allow communication on the following:</p> <ul style="list-style-type: none"> -URL: bromic.production.broker.eu.freia.io -Port: 8883 inbound and outbound -URL: Pool.ntp.org -Port: 123 inbound and outbound -DNS: IP 8.8.8.8 -Port: 53 inbound and outbound



For additional assistance please scan the QR code below for instructional videos and troubleshooting support.