

Thank you for purchasing a BN Thermic product. Manufactured to a high standard, this product will, if used according to these instructions and properly maintained, give you years of trouble free performance. Please ensure instructions remain with your customer for their reference.



**REGISTER:** PLEASE REGISTER THIS PRODUCT ONLINE TO ACTIVATE YOUR GUARANTEE AT  
[www.bnthermic.co.uk](http://www.bnthermic.co.uk)



**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS, NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS, AND CAUTIONS. USE THIS PRODUCT CORRECTLY, AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY.

## 1. SAFETY INSTRUCTIONS

### 1.1 ELECTRICAL SAFETY

**WARNING!** It is the responsibility of the owner and the operator to read, understand and comply with the following:

You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices. A Residual Current Circuit Breaker (RCCB) should be incorporated in the main distribution board. If in any doubt consult a qualified electrician.

You must also read and understand the following instructions concerning electrical safety.

- The Health & Safety at Work Act 1974 makes owners of electrical appliances responsible for the safe condition of those appliances and the safety of the appliance operators. If in any doubt about electrical safety, contact a qualified electrician.
- Installation should always be carried out by a qualified electrician or a competent person in accordance with current electrical regulation.
- Ensure that the insulation of all the cables on the appliance is undamaged and safe, before connecting it to the power supply.
- Ensure that the cables are always protected against short circuit and overload.
- Regularly inspect the power supply cables and plugs etc. for wear or damage and check all connections to ensure that none are loose.
- Important: Ensure that the voltage marked on the appliance matches the power supply to be used and that a correctly rated fuse is fitted.
- DO NOT use worn or damaged cables, plugs or connectors. Immediately have any faulty item repaired or replaced by a qualified electrician.
- The unit should be protected by a suitably rated isolator and fuse or MCB.
- Tubular heaters are IP66 rated.
- Do not attach this tubular heater to an extension cord it must be hard wired in position.

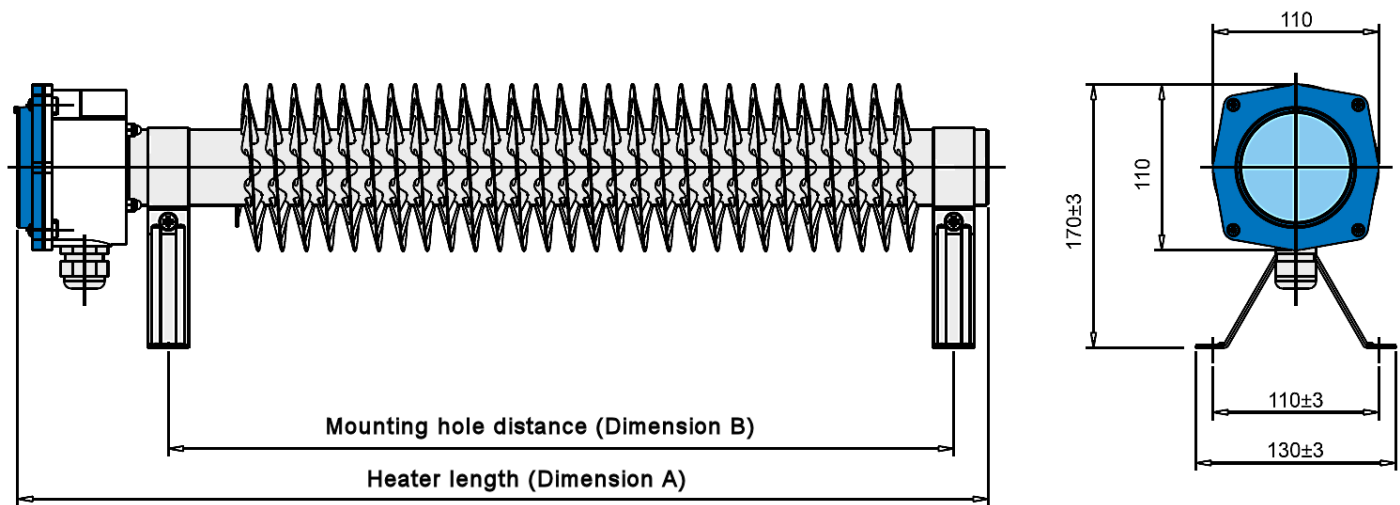
### 1.2 GENERAL SAFETY INSTRUCTIONS

- ✓ Remove all packaging and store it away from children, check the package and heater for visible damage or tampering.
- ✓ Familiarise yourself with the applications and limitations of the tubular heater.
- ✓ Ensure the tubular heater is in good order and condition both physically and electrically before use. If in any doubt, do not use the unit and contact your supplier.
- ✓ Only use recommended attachments and parts. To use unauthorised parts may be dangerous and will invalidate your warranty.
- ✓ Keep tools and other items away from the tubular heater when it is in use.
- ✓ Keep children and unauthorised persons away from the heater, as it gets very **hot**. An optional grille is available.
- ✓ Disconnect from mains and allow to cool before attempting any cleaning or maintenance.
- X **DO NOT** use in areas where hazardous gasses or dusts may be present.
- X **DO NOT** locate the heater directly below the power outlet.
- X **DO NOT** disassemble the heater for any reason. This heater must be checked by qualified personnel only.
- X **DO NOT** use this tubular heater to perform a task for which it has not been designed.
- **WARNING!** Some models (U Type) are not equipped with a built-in device to control the room temperature. Do not use this heater in a small room if it is occupied by people not capable of leaving the room on their own, unless constant supervision is provided.
- **WARNING!** Ensure you observe the safety distances and mounting heights and there is no possibility of inflammable materials coming into contact.



## 2. INTRODUCTION & SPECIFICATION

This tubular heater produces a totally dry heat, no condensation, no gas, no fumes. It reaches maximum heat output within a few minutes from being turned on. It is quick and easy to install reducing installation costs.



Model	Volts	Watts	Dimension A (mm)	Dimension B (mm)	IP Rating	Built-in Thermostat	Thermostat Range	Weight (kg)	Optional Guard
SWD-A-500	230	500	440	320	66	Yes	+5 to +30°C	3.0	SWG-1
SWD-A-1000	230	1000	640	520	66	Yes	+5 to +30°C	4.8	SWG-2
SWD-A-1500	230	1500	840	720	66	Yes	+5 to +30°C	6.2	SWG-3
SWD-A-2000	230	2000	1040	920	66	Yes	+5 to +30°C	7.7	SWG-3
SWD-A-3000	230	3000	1440	1320	66	Yes	+5 to +30°C	10.9	SWG-4
SWD-U-500	230	500	440	320	66	No	N/A	3.0	SWG-1
SWD-U-1000	230 or 400/3P	1000	640	520	66	No	N/A	4.8	SWG-2
SWD-U-1500	230 or 400/3P	1500	840	720	66	No	N/A	6.2	SWG-3
SWD-U-2000	230 or 400/3P	2000	1040	920	66	No	N/A	7.7	SWG-3
SWD-U-3000	230 or 400/3P	3000	1440	1320	66	No	N/A	10.9	SWG-4
SWD-U-4000	230 or 400/3P	4000	1840	1720	66	No	N/A	13.7	SWG-5
SWD-U-500-1	110	500	440	320	66	No	N/A	3.0	SWG-1
SWD-U-1000-1	110	1000	640	520	66	No	N/A	4.8	SWG-2
SWD-U-1500-1	110	1500	840	720	66	No	N/A	6.2	SWG-3

**All Heaters** – Ø Main Heater Tube – 50mm, Ø Outer Fins – 110mm, Finned Tube Material – 409 Stainless Steel, Cable Gland Entry – M20 x 1.5, Maximum Surface Temperature - 240°C.

Note – All heaters are supplied with a cable gland.

## 3. LOCATION OF TUBULAR HEATER

- ❑ **IMPORTANT!** DO NOT mount the heater directly below the socket outlet.
- ❑ **IMPORTANT!** Ensure that the mounting surface can take the weight of the heater.
- ❑ **IMPORTANT!** Do not allow any object to come closer than 0.3m to the heater.

The heater is intended to be mounted horizontally at either high level or low level.

It must be fixed securely to a wall or floor using the mounting brackets provided.

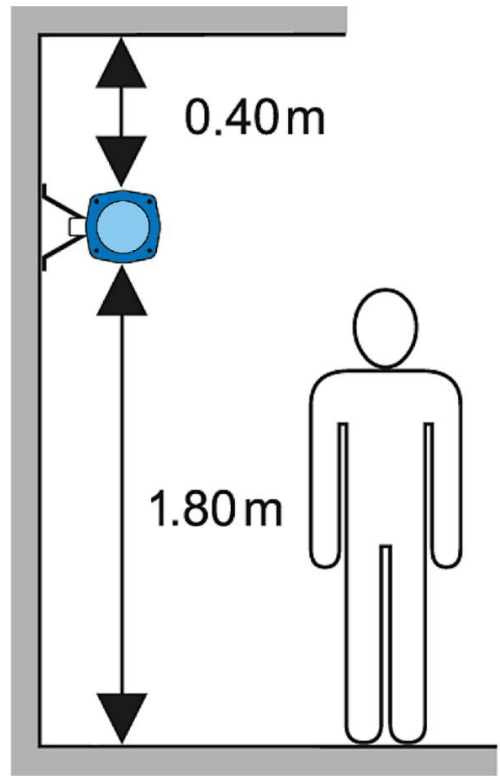
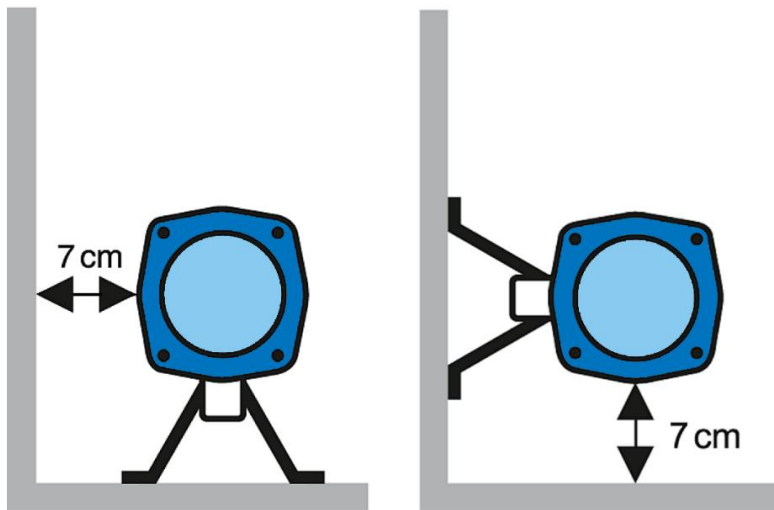
When the heater is installed in an area to which personnel have access the SWG protective guard must be used.

When in use the stainless steel tube and fins become very hot and contact must be avoided.

A minimum clearance of 400mm (40cm) above the heater should be allowed for.

Ensure the heater is installed where it cannot be covered.

A minimum 300mm area around the heater must be observed and no object should be placed within this area.



Please Note – The 1.80m mounting height is the minimum recommended height if you wish to mount high on a wall, are not using the protective guard and people are present.

#### 4. ELECTRICAL CONNECTIONS

##### 4.1 230V SINGLE PHASE.

Please make sure you have read the Safety instructions and that you are a suitably qualified electrician before continuing. Pictures below show connections inside the terminal box on the heater. **Do NOT use power tools to undo or do up terminal or enclosure screws.**

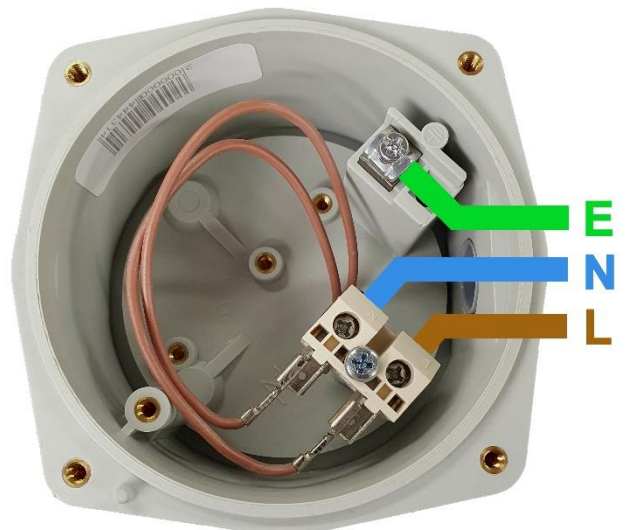
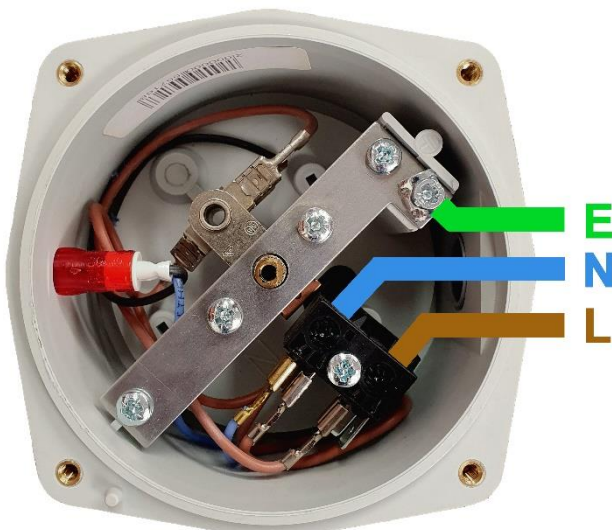
Please Note:- Specified cable sizes are for typical installations, correction factors may need to be used when determining actual cable sizes.

Use 1.5mm<sup>2</sup> 3 core mains cable for all 230V heaters under 3kW and 110V 500W and 1000W (see note above).

Use 2.5mm<sup>2</sup> 3 core mains cable for 230V 3kW, 4kW and 110V 1500W heaters (see note above).

##### All Thermostat Model Heaters

##### 500W Model No. SWD-U-500



Connect Brown wire – Terminal L.  
Connect Blue wire – Terminal N.  
Connect Green / Yellow wire - Terminal E

Connect Brown wire – Terminal L.  
Connect Blue wire – Terminal N.  
Connect Green / Yellow wire - Terminal E

PLEASE NOTE:- If you remove the terminal block when wiring, it must be screwed back onto its holder making sure it does not touch the thermostat. Please also ensure that the mains cables do not touch the thermostat workings and stop it operating correctly.

Ensure you correctly tighten the cable gland before securing the terminal box cover using the four screws.



## All Non-Thermostat Model Heaters 1000W – 4000W

Connect Brown wire – Terminal L.  
Connect Blue wire – Terminal N.  
Connect Green / Yellow wire - Terminal E

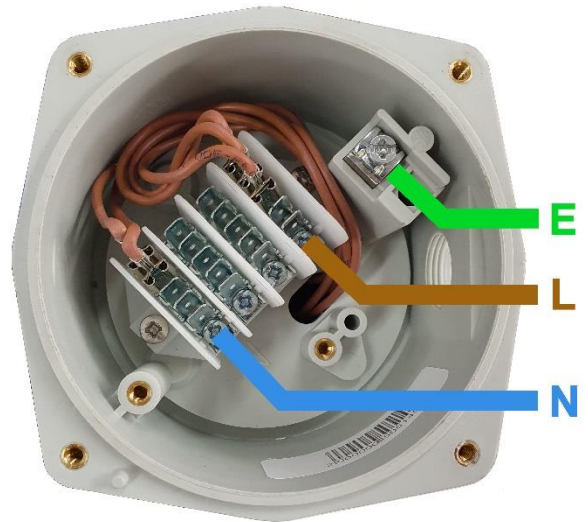
Ensure you correctly tighten the cable gland before securing the terminal box cover using the four screws.

### 4.2 400V THREE PHASE.

Please make sure you have read the Safety instructions and that you are a suitably qualified electrician before continuing.

Pictures show connections inside the terminal box on the heater. **Do NOT use power tools to undo or do up terminal screws or the enclosure screws.**

Please Note:- Specified cable sizes are for typical installations, correction factors may need to be used when determining actual cable sizes.

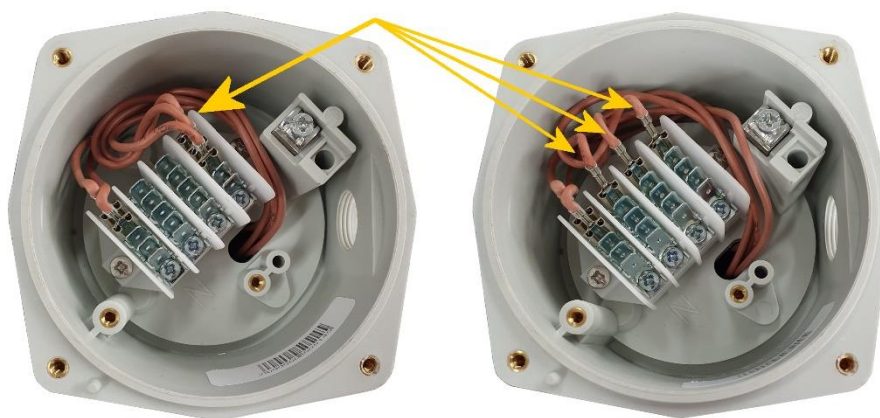


Use minimum 1mm<sup>2</sup> 5 Core Cable for 1000W, 1500W and 2000W heaters (see note above).

Use minimum 1.5mm<sup>2</sup> 5 Core Cable for 3000W and 4000W heaters (see note above).

Move two of the push on connections from the right terminal block over to the empty connections as per picture to the left.

**DO NOT MOVE THE TWO NEUTRAL CONNECTIONS WHICH ARE TO THE LEFT END OF THE TERMINAL BLOCK.**



Connect Brown wire (Phase 1) – Terminal L1.  
Connect Grey wire (Phase 2) – Terminal L2.  
Connect Black wire (Phase 3) – Terminal L3.  
Connect Blue wire – Terminal N.  
Connect Green / Yellow wire - Terminal E

Ensure you correctly tighten the cable gland before securing the terminal box cover using the four screws.

## 5. MAINTENANCE

BN Thermic electric heaters are factory assembled and tested and are non-user serviceable. they are intended to operate for many years problem free.

Maintenance is limited to periodic cleaning to ensure there is no build-up of dust. Before cleaning ensure the supply to the heater is completely isolated and the heater has cooled down

If in any doubt always consult a qualified electrician for advice.

**NOTE:** It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.



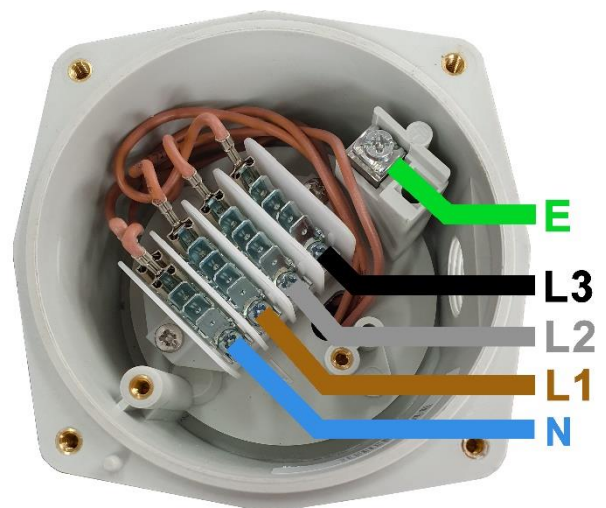
### WEEE REGULATIONS:

This appliance bears the symbol of the crossed waste bin. This indicates that, at the end of its useful life, it must not be disposed of as domestic waste, but must be taken to a collection centre for waste electrical and electronic equipment. It is the user's responsibility to dispose of this appliance through the appropriate channels. Failure to do so may incur penalties established by laws governing waste disposal.

**IMPORTANT:** No liability is accepted for incorrect use of this product.

**WARRANTY:** Your BN Thermic product is guaranteed for one year from date of purchase. We will repair or replace at our discretion any part found to be defective. We cannot assume any consequential liability. This guarantee in no way prejudices your rights under common law and is offered as an addition to consumer liability rights.

**REGISTER:** Activate your warranty by registering online at [www.bnthermic.co.uk](http://www.bnthermic.co.uk) and retain this installation data for future reference.



BN Thermic Ltd,  
34 Stephenson Way,  
Crawley, RH10 1TN  
Tel: 01293 547361  
[sales@bnthermic.co.uk](mailto:sales@bnthermic.co.uk)  
[www.bnthermic.co.uk](http://www.bnthermic.co.uk)