



**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS IN CONJUNCTION WITH THE HEATER INSTRUCTIONS, NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS, AND CAUTIONS. **IF YOU NEED TO DRILL HOLES IN THE BACK BOX, PLEASE READ THE FOLLOWING INSTRUCTIONS AS IT IS CRITICAL THE HOLES ARE ONLY DRILLED IN CERTAIN AREAS. INCORRECT DRILLING OF THE ENCLOSURE IS NOT COVERED BY THE GUARANTEE.**



## PART 2 – INSTALLATION INSTRUCTIONS.

For user and programming instructions see separate leaflet

### 1. INSTALLATION SAFETY INSTRUCTIONS.

#### 3.1 ELECTRICAL SAFETY

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.
- This controller is IP20 rated and is suitable for indoor use only.

#### 3.2 GENERAL SAFETY INSTRUCTIONS

- X **DO NOT** use in areas where hazardous gasses or dusts may be present.
- X **DO NOT** use this controller to perform a task for which it has not been designed.

Please leave the user instructions with the end user where they should be kept in a safe place for further reference.

### 2. INSTALLATION.

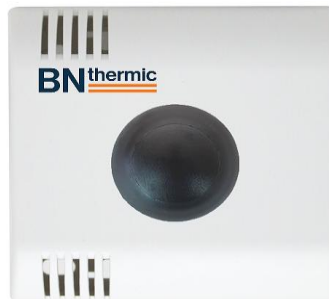
The CS-DT / CS-WIFI thermostat can be used with its internal air sensor or if required with an optional remote air sensor or optional remote black bulb sensor.



Optional Air Sensor  
Part No. CXS



Optional IP Rated Air Sensor  
Part No. CXSIP



Optional Black Bulb Sensor  
Part No. BBS



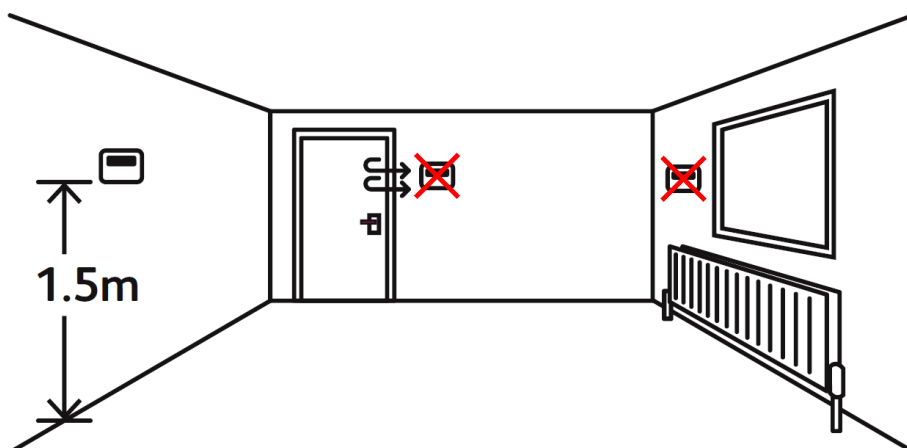
Optional IP Rated Black Bulb Sensor  
Part No. BBSIP

### 3. MOUNTING THE THERMOSTAT.

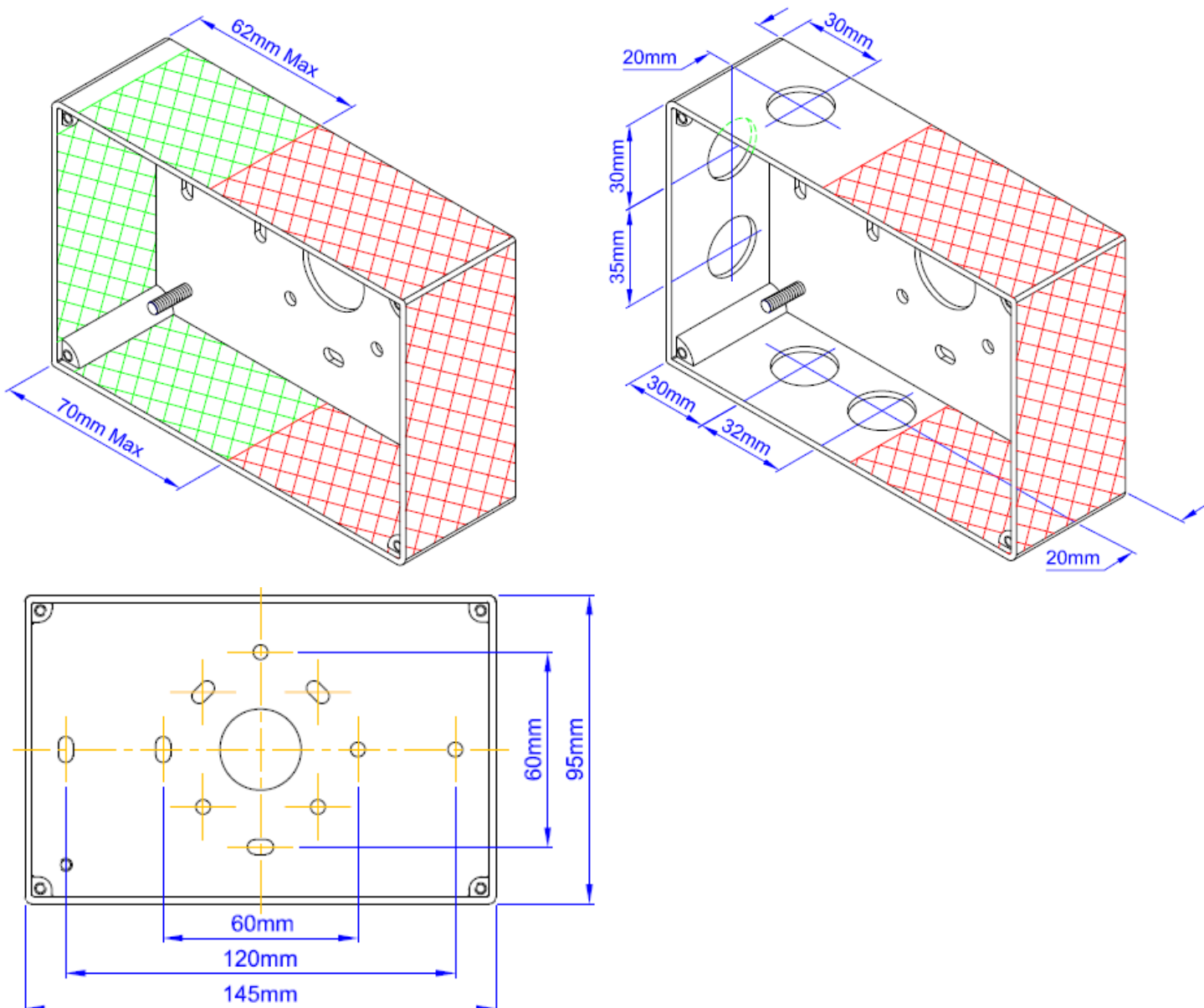
#### 3.1 CHOOSING A LOCATION FOR YOUR CS-DT / CS-WIFI AND / OR REMOTE SENSOR

The CS-DT / CS-WIFI controller or sensor should be mounted on an internal wall approximately 1.5 meters from floor level and should be in a position away from draughts, direct heat and sunlight.

If you decide to use a remote sensor you will need to change "A4" to "N2" on the master / default settings. See section 4 (page 5 & 6) of the user instructions for more information.

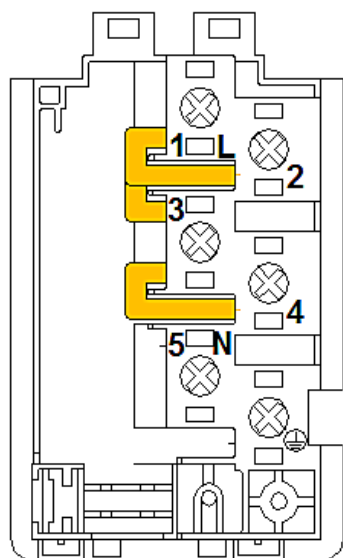


If you need to drill holes in the back box of the enclosure, please use the following drawings and template provide to ensure they are in the correct position. We recommend maximum 20mm holes as per drawing.



#### 4. ELECTRICAL CONNECTIONS.

**IMPORTANT – We use two different versions of control box. Sections 5 to 7 show version 1**  
**Section 8 and 9 show version 2 control box.**

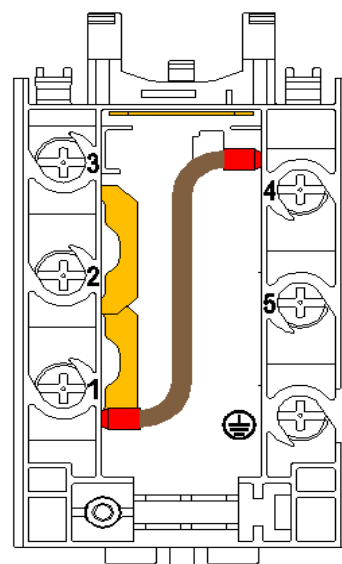


#### Version 1 Control Box

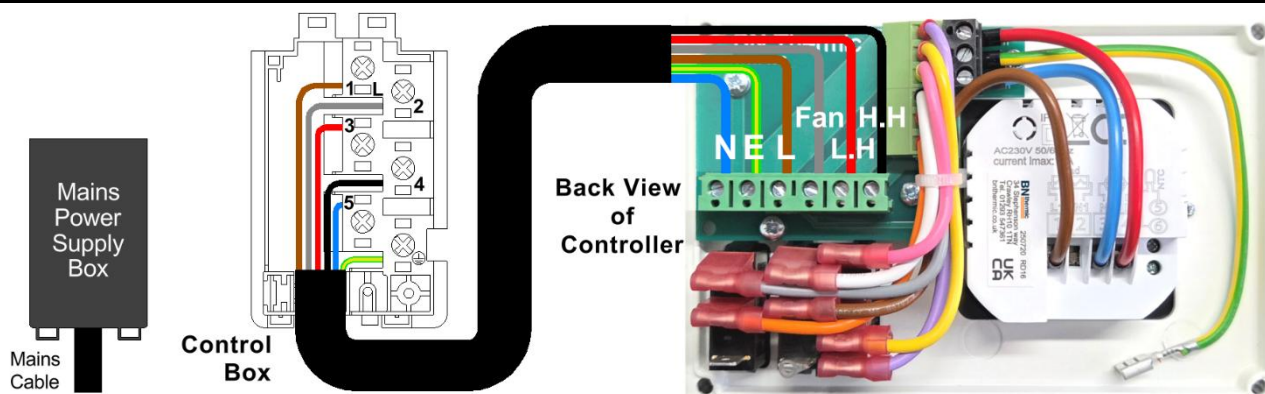
Please ensure you follow the correct wiring diagram for the heater you are connecting the CS-DT / CS-WIFI controller too.  
 Incorrect installation may damage the heater and is not covered by the guarantee.

The model number of the heater can be found on the silver label attached to the heater close to the mains cable electrical connection box


#### Version 2 Control Box



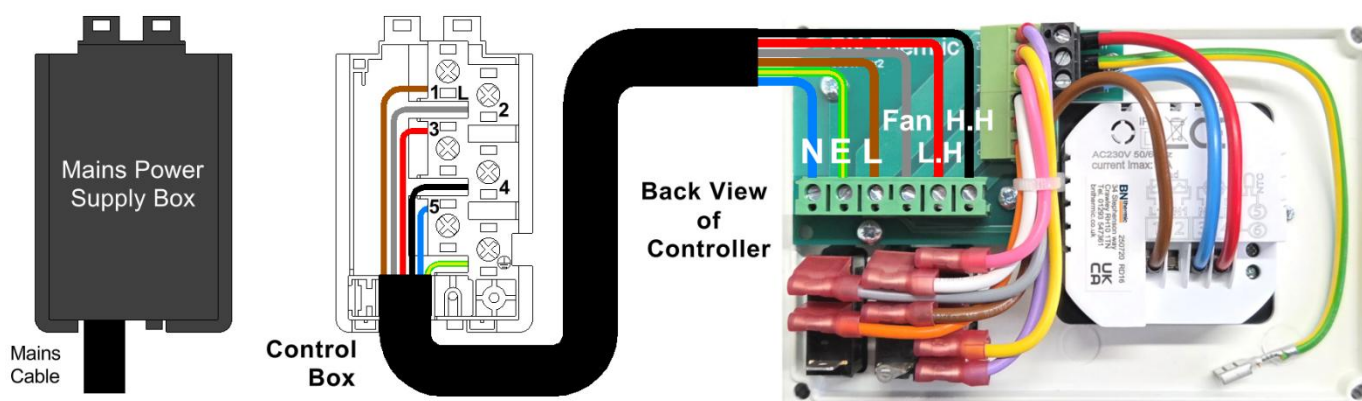
## 5. Heater Model – 830




Use 1.5mm<sup>2</sup> 6 Core Cable to connect the heater to the CS-DT / CS-WIFI Controller (see note above).

Remove any links  that may be present in heater control box between terminals 1,2,3,4 or 5.  
For Mains cable wiring and sizes see instructions with each Heater.

## 6. Heater Models – 860 / 890 / CAS-30 / CAD-60 / CAD-90 / CAT-90 / CAT-135 / CAH-180 / SCHG-45 / SCHG-60 / SMH-30 / SMH-45 / SMH-60 / RH60



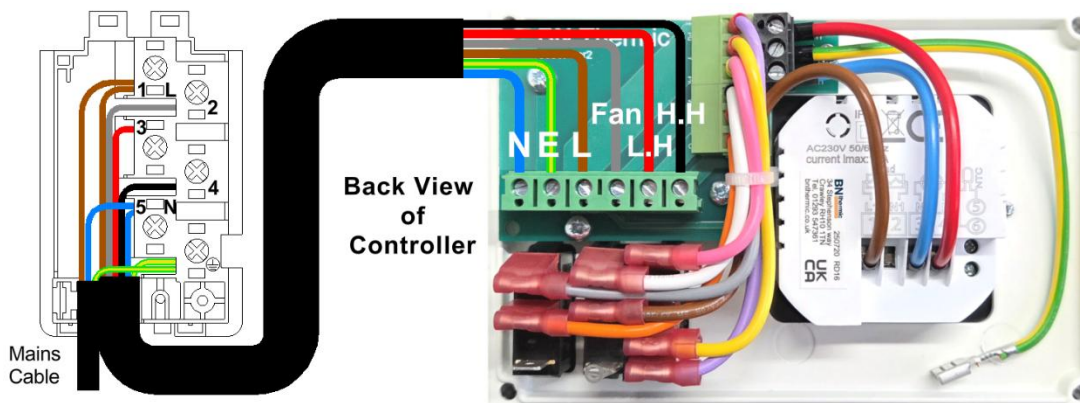
Use 6 Core Cable to connect the Heater to the CS-DT / CS-WIFI Controller. For sizes see table below (also see note above).

Remove any links  that may be present in heater control box between terminals 1,2,3,4 or 5.  
For Mains cable wiring and sizes see instructions with each Heater.


Control Box to CS-DT / CS-WIFI Controller Cable sizes (See note at top of page)

Model No.	Minimum Wire Size	Model No.	Minimum Wire Size	Model No.	Minimum Wire Size	Model No.	Minimum Wire Size
860	1.5mm <sup>2</sup> 6 Core Cable	CAD-90	0.75mm <sup>2</sup> 6 Core Cable	SCHG-45	DO NOT USE	SMH-30	1.5mm <sup>2</sup> 6 Core Cable
890	0.75mm <sup>2</sup> 6 Core Cable	CAT-90	0.75mm <sup>2</sup> 6 Core Cable	SCHG-45R	1.5mm <sup>2</sup> 6 Core Cable	SMH-45	DO NOT USE
CAS-30	1.5mm <sup>2</sup> 6 Core Cable	CAT-135	0.75mm <sup>2</sup> 6 Core Cable	SCHG-60	1.5mm <sup>2</sup> 6 Core Cable	SMH-45R	1.5mm <sup>2</sup> 6 Core Cable
CAD-60	1.5mm <sup>2</sup> 6 Core Cable	CAH-180	0.75mm <sup>2</sup> 6 Core Cable	RH60	1.5mm <sup>2</sup> 6 Core Cable	SMH-60	1.5mm <sup>2</sup> 6 Core Cable

## 7. Heater Models – SCHG-30 / RH20 / RH30



Use 6 Core Control Cable to connect the Heater to the CS-DT / CS-WIFI Controller. For sizes see table below (also see note above).

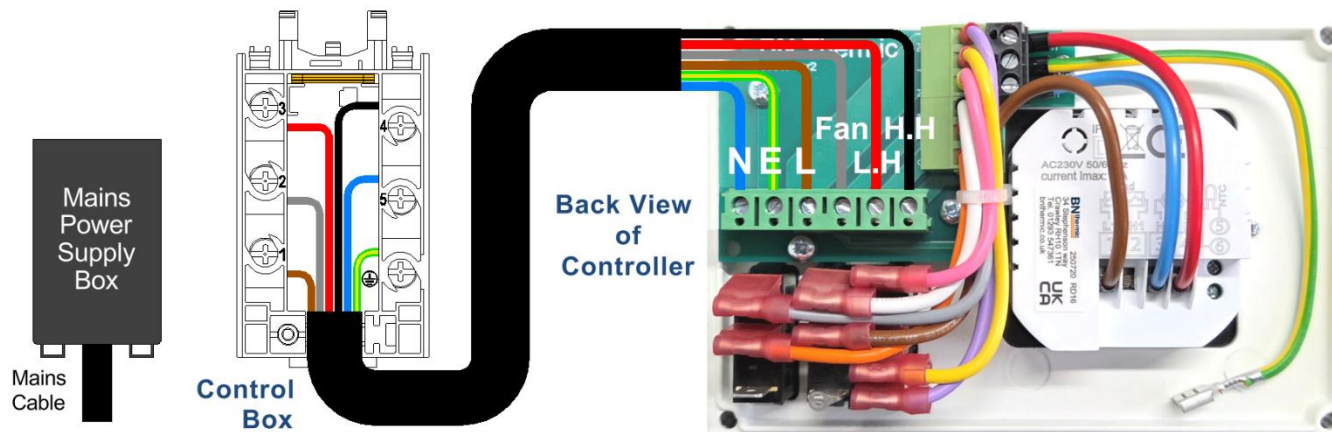
Remove any links  that may be present in heater control box between terminals 1,2,3,4 or 5.  
For Mains cable wiring and sizes see instructions with each Heater.

Control Box to CS-DT / CS-WIFI Controller Cable sizes (See note at top of page)


Model No.	Minimum Wire Size	Model No.	Minimum Wire Size	Model No.	Minimum Wire Size		
SCHG-30	1.5mm <sup>2</sup> 6 Core Cable	RH20	1.25mm <sup>2</sup> 5 Core Cable	RH30	1.5mm <sup>2</sup> 6 Core Cable		



## 8. Heater Models – 830 / CAS-30 / SCHG-30 / RH20 / RH30



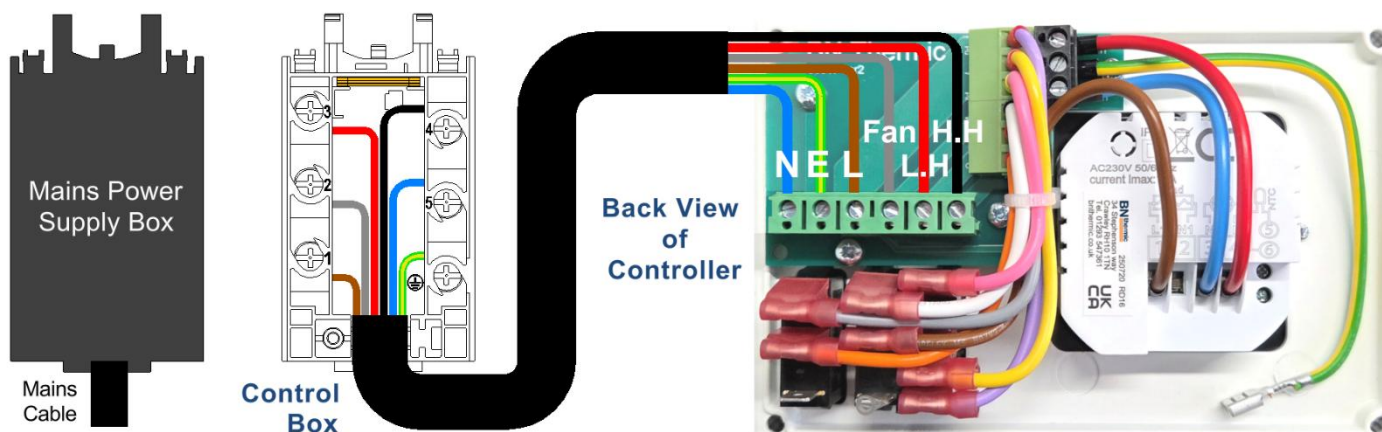
Use 6 Core Control Cable to connect the Heater to the CS-DT / CS-WIFI Controller. For sizes see table below (also see note above).

Remove any links  and Link Cable that are present in the heater control box between terminals 1,2,3,4 or 5.  
For Mains cable wiring and sizes see instructions with each Heater.


Control Box to CS-DT / CS-WIFI Controller Cable sizes (See note at top of page)

Model No.	Minimum Wire Size	Model No.	Minimum Wire Size	Model No.	Minimum Wire Size	Model No.	Minimum Wire Size
830	1.5mm <sup>2</sup> 6 Core Cable	CAS-30	1.5mm <sup>2</sup> 6 Core Cable	SCHG-30	1.5mm <sup>2</sup> 6 Core Cable	RH20	1.25mm <sup>2</sup> 6 Core Cable
RH30	1.5mm <sup>2</sup> 6 Core Cable						

## 9. Heater Models – 860 / 890 / CAD-60 / CAD-90 / CAT-90 / CAT-135 / CAH-180 / SCHG-45 / SCHG-60 / SMH-30 / SMH-45 / SMH-60 / RH60



Use 6 Core Control Cable to connect the Heater to the CS-DT / CS-WIFI Controller. For sizes see table below (also see note above).

Remove any links  and Link Cable that are present in the heater control box between terminals 1,2,3,4 or 5.  
For Mains cable wiring and sizes see instructions with each Heater.

Control Box to CS-DT / CS-WIFI Controller Cable sizes (See note at top of page)

Model No.	Minimum Wire Size	Model No.	Minimum Wire Size	Model No.	Minimum Wire Size	Model No.	Minimum Wire Size
860	1.5mm <sup>2</sup> 6 Core Cable	CAT-90	0.75mm <sup>2</sup> 6 Core Cable	SCHG-45R	1.5mm <sup>2</sup> 6 Core Cable	SHM-45	DO NOT USE
890	0.75mm <sup>2</sup> 6 Core Cable	CAT-135	0.75mm <sup>2</sup> 6 Core Cable	SCHG-60	1.5mm <sup>2</sup> 6 Core Cable	SHM-45R	1.5mm <sup>2</sup> 6 Core Cable
CAD-60	1.5mm <sup>2</sup> 6 Core Cable	CAH-180	0.75mm <sup>2</sup> 6 Core Cable	RH60	1.5mm <sup>2</sup> 6 Core Cable	SMH-60	1.5mm <sup>2</sup> 6 Core Cable
CAD-90	0.75mm <sup>2</sup> 6 Core Cable	SCHG-45	DO NOT USE	SMH-30	1.5mm <sup>2</sup> 6 Core Cable		

**PLEASE CHECK ALL CONNECTIONS BEFORE TURNING ON AS INCORRECT WIRING IS NOT COVERED BY THE GUARANTEE**

**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.

**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.

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