

Thank you for purchasing a BNThermic 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.



**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS IN CONJUNCTION WITH THE HEATER 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.

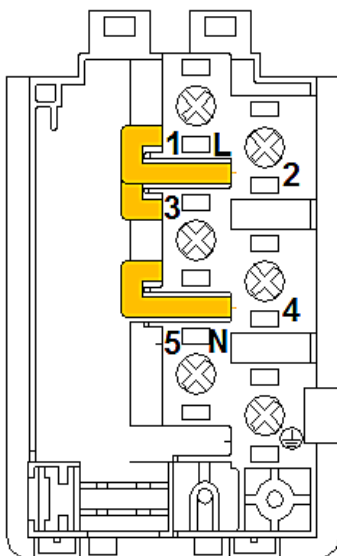


Please ensure you follow the correct wiring diagram for the heater you are connecting the CS-7 controller too.  
Incorrect installation may damage the heater and is not covered by the guarantee.

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

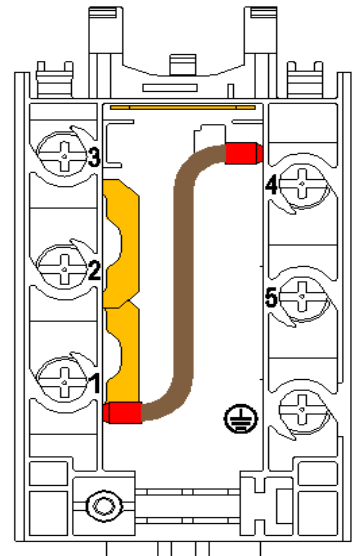
The model number of the heater can be found on the silver label attached to the heater close to the mains cable electrical connection box.

**IMPORTANT – We use two different versions of control box. Section 1 to 5 shows version 1  
Section 6 – 9 shows version 2 control box.**

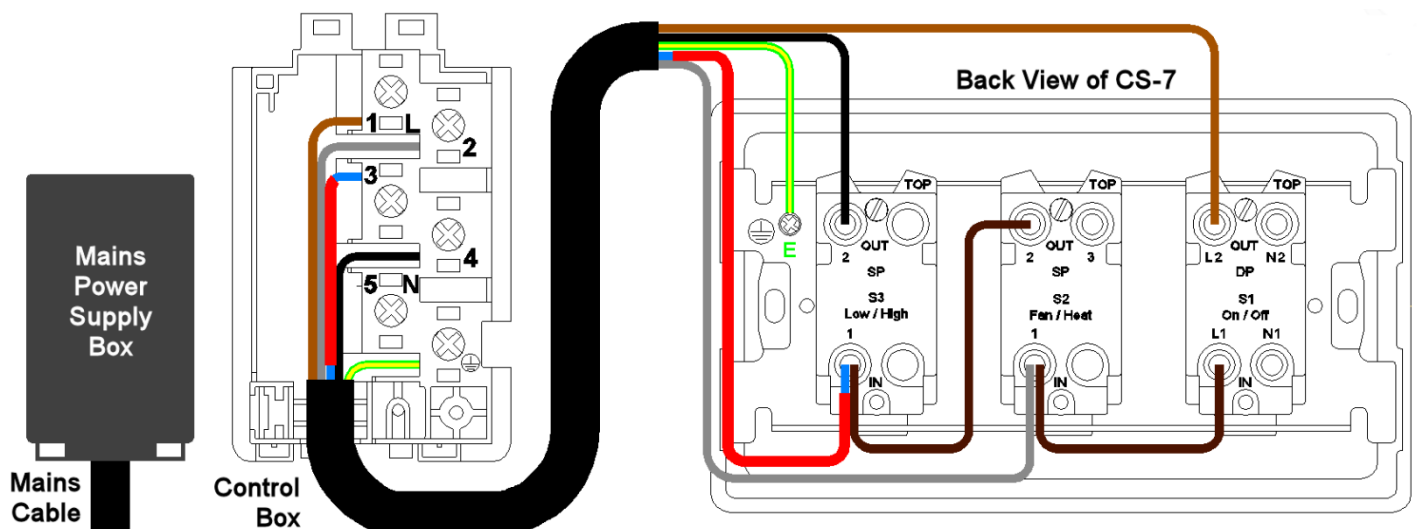


Version 1  
Control Box


Version 2  
Control Box



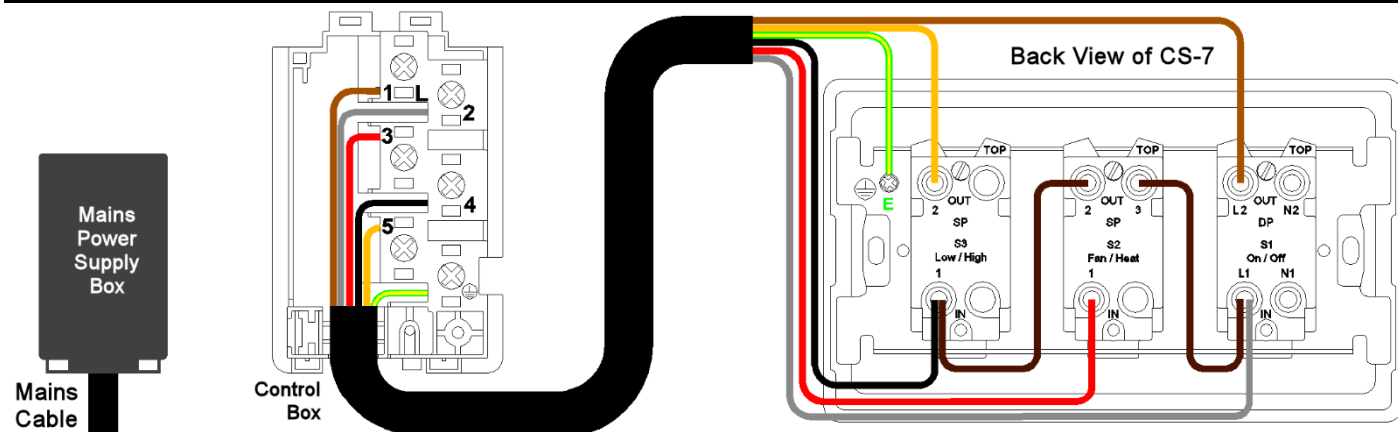
## 1. Heater Model – 830




Use 1.5mm<sup>2</sup> 5 Core Cable to connect the heater to the CS-7 Controller (see note above).

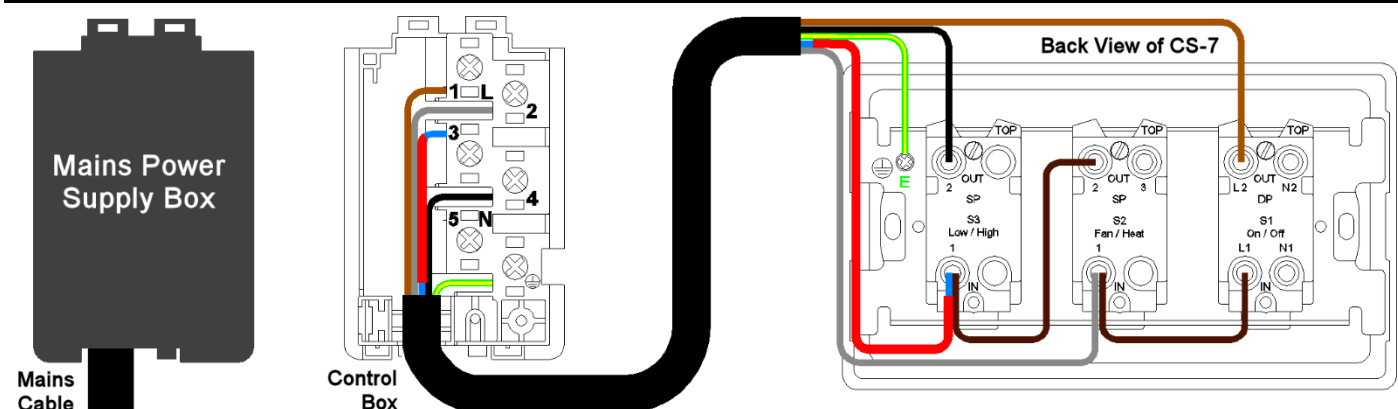
Remove any links  that may be present in heater control box between terminals 1,2,3,4 or 5.  
Ensure the dark brown link wires are in the correct position in the CS-7 Switch as shown above.  
For Mains cable wiring and sizes see instructions with each Heater.


## 2. Heater Model – 830T



Use 1.5mm<sup>2</sup> 6 Core Cable to connect the heater to the CS-7 Controller (see note above). Remove any links  that may be present in heater control box between terminals 1,2,3,4 or 5. Ensure the dark brown link wires are in the correct position in the CS-7 Switch as shown above. For Mains cable wiring and sizes see instructions with each Heater.

## 3. 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

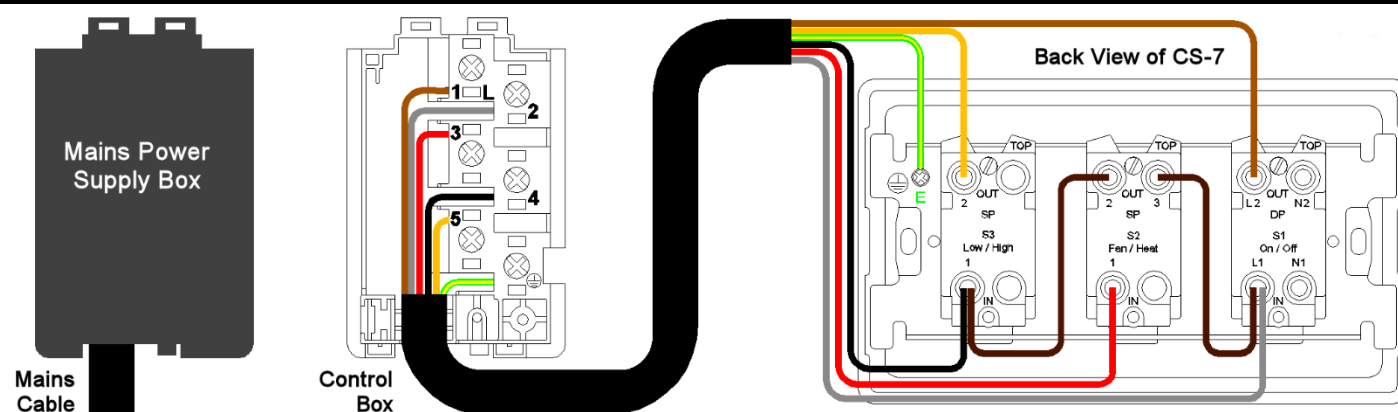



Use 5 Core Control Cable to connect the Heater to the CS-7 Controller. For sizes see table below (also see note above). Remove any links  that may be present in heater control box between terminals 1,2,3,4 or 5. Ensure the dark brown link wires are in the correct position in the CS-7 Switch as shown above. For Mains cable wiring and sizes see instructions with each Heater.

Control Box to CS-7 Switch 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> 5 Core Cable	CAD-90	0.75mm <sup>2</sup> 5 Core Cable	SCHG-45	2.5mm <sup>2</sup> 5 Core Cable	SMH-30	1.5mm <sup>2</sup> 5 Core Cable
890	0.75mm <sup>2</sup> 5 Core Cable	CAT-90	0.75mm <sup>2</sup> 5 Core Cable	SCHG-60	1.5mm <sup>2</sup> 5 Core Cable	SMH-45	2.5mm <sup>2</sup> 5 Core Cable
CAS-30	1.5mm <sup>2</sup> 5 Core Cable	CAT-135	0.75mm <sup>2</sup> 5 Core Cable	RH60	1.5mm <sup>2</sup> 5 Core Cable	SMH-60	1.5mm <sup>2</sup> 5 Core Cable
CAD-60	1.5mm <sup>2</sup> 5 Core Cable	CAH-180	0.75mm <sup>2</sup> 5 Core Cable				

## 4. Heater Models – 860T / 890T / SCHG-30T / SMH-30T



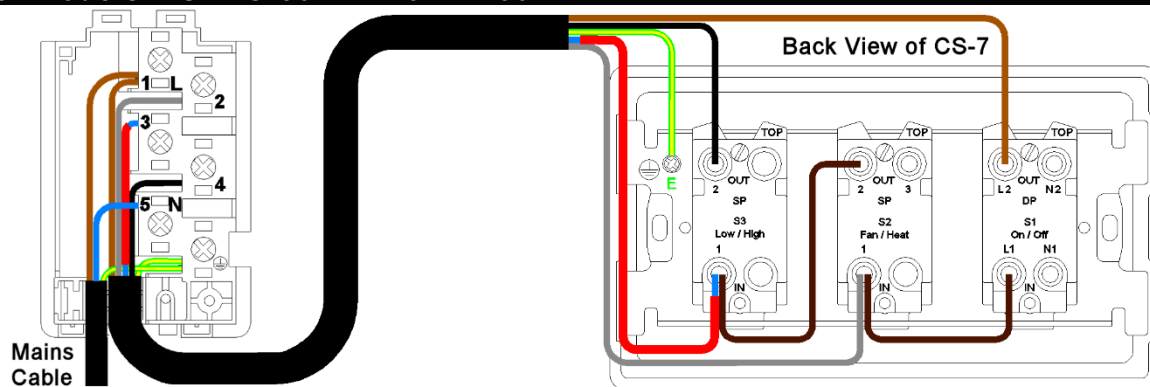
Use 6 Core Control Cable to connect the Heater to the CS-7 Controller. For sizes see table below (also see note above). Remove any links  that may be present in heater control box between terminals 1,2,3,4 or 5. Ensure the dark brown link wires are in the correct position in the CS-7 Switch as shown above. For Mains cable wiring and sizes see instructions with each Heater.


Control Box to CS-7 Switch 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
860T	1.5mm <sup>2</sup> 6 Core Cable	890T	0.75mm <sup>2</sup> 6 Core Cable	SCHG-30T	1.5mm <sup>2</sup> 6 Core Cable	SMH-30T	1.5mm <sup>2</sup> 6 Core Cable

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

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

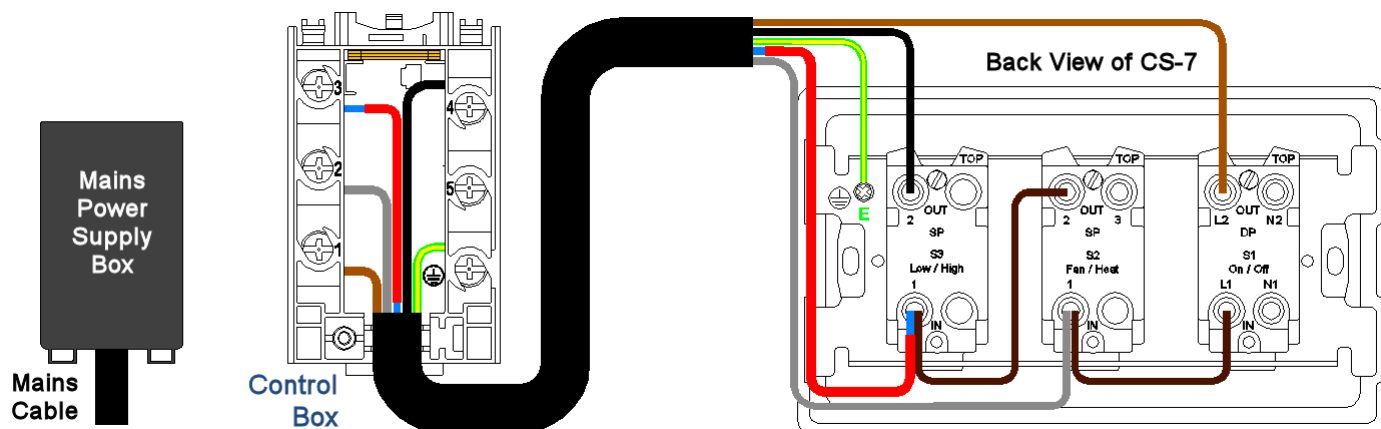



Use 5 Core Control Cable to connect the Heater to the CS-7 Controller. For sizes see table below (also see note above). Remove any links  that may be present in heater control box between terminals 1,2,3,4 or 5. Ensure the dark brown link wires are in the correct position in the CS-7 Switch as shown above. For Mains cable wiring and sizes see instructions with each Heater.

Control Box to CS-7 Switch 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> 5 Core Cable	RH20	1.25mm <sup>2</sup> 5 Core Cable	RH30	1.5mm <sup>2</sup> 5 Core Cable

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

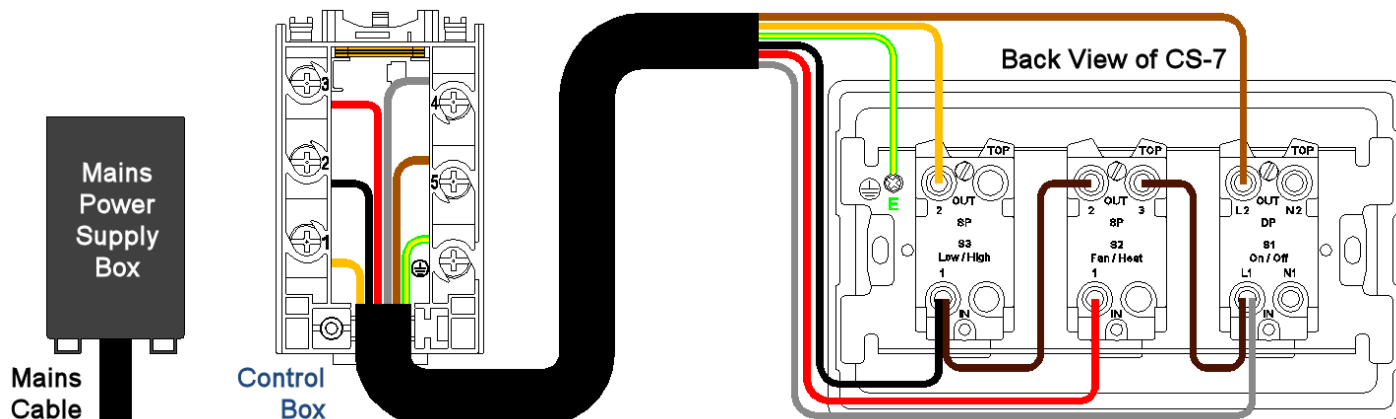



Use 5 Core Control Cable to connect the Heater to the CS-7 Controller. For sizes see table below (also see note above). Remove any links  and Link Cable that are present in the heater control box between terminals 1,2,3,4 or 5. Ensure the dark brown link wires in the CS-7 Switch are in the correct position as shown above. For Mains cable wiring and sizes see instructions with each Heater.

Control Box to CS-7 Switch 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> 5 Core Cable	CAS-30	1.5mm <sup>2</sup> 5 Core Cable	SCHG-30	1.5mm <sup>2</sup> 5 Core Cable	RH20	1.25mm <sup>2</sup> 5 Core Cable
RH30	1.5mm <sup>2</sup> 5 Core Cable						

## 7. Heater Models – 830T / SCHG-30T



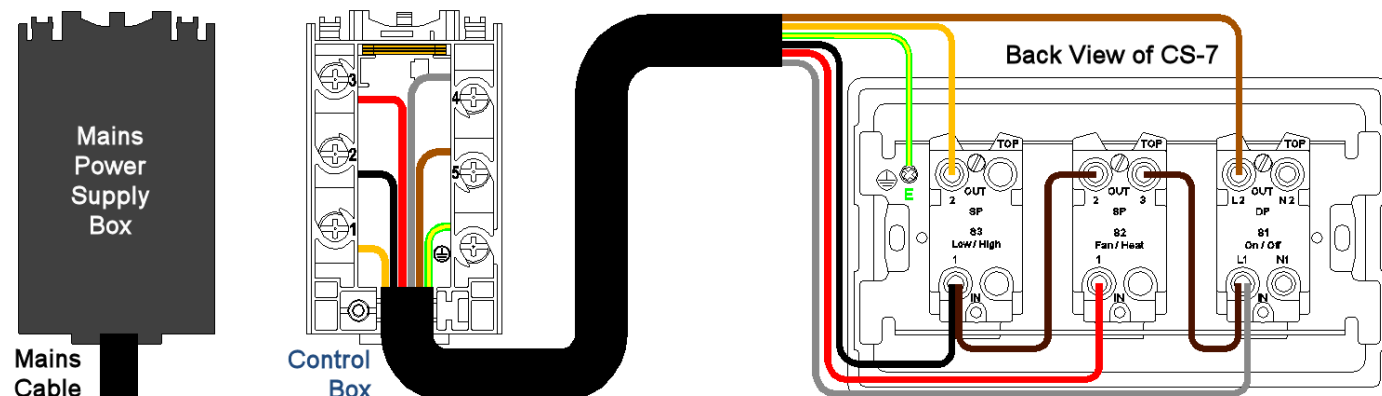
Use 6 Core Control Cable to connect the Heater to the CS-7 Controller. For sizes see table below (also see note above). Remove any links  and Link Cable that are present in the heater control box between terminals 1,2,3,4 or 5. Ensure the dark brown link wires in the CS-7 Switch are in the correct position as shown above. For Mains cable wiring and sizes see instructions with each Heater.


Control Box to CS-7 Switch Cable sizes (See note at top of page)

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

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

## 8. Heater Models – 860T / 890T / SMH-30T

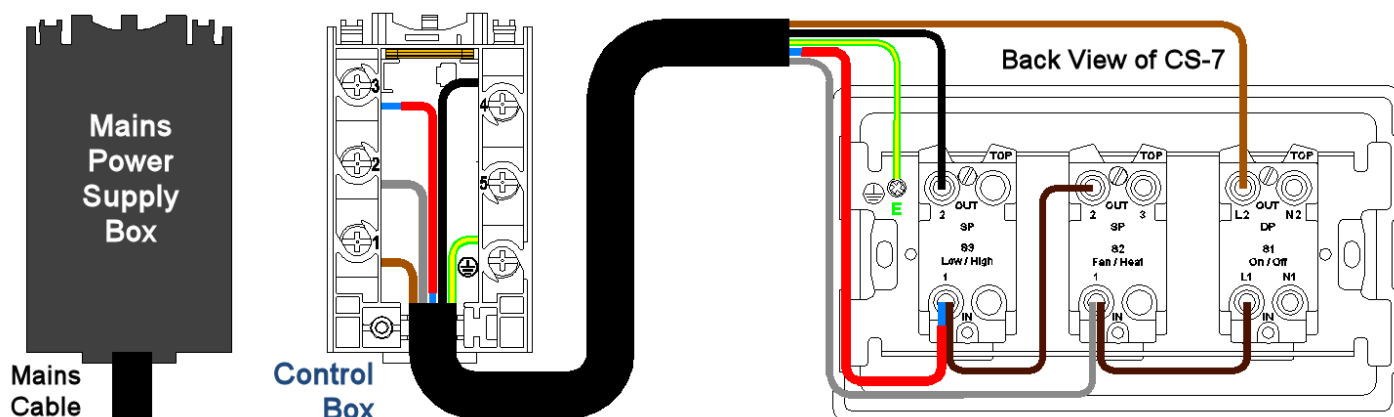



Use 6 Core Control Cable to connect the Heater to the CS-7 Controller. For sizes see table below (also see note above). Remove any links  and Link Cable that are present in the heater control box between terminals 1,2,3,4 or 5. Ensure the dark brown link wires in the CS-7 Switch are in the correct position as shown above. For Mains cable wiring and sizes see instructions with each Heater.

Control Box to CS-7 Switch 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
860T	1.5mm <sup>2</sup> 6 Core Cable	890T	0.75mm <sup>2</sup> 6 Core Cable	SMH-30T	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 5 Core Control Cable to connect the Heater to the CS-7 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. Ensure the dark brown link wires in the CS-7 Switch are in the correct position as shown above. For Mains cable wiring and sizes see instructions with each Heater.

Control Box to CS-7 Switch 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> 5 Core Cable	CAT-90	0.75mm <sup>2</sup> 5 Core Cable	SCHG-45	2.5mm <sup>2</sup> 5 Core Cable	SMH-30	1.5mm <sup>2</sup> 5 Core Cable
890	0.75mm <sup>2</sup> 5 Core Cable	CAT-135	0.75mm <sup>2</sup> 5 Core Cable	SCHG-60	1.5mm <sup>2</sup> 5 Core Cable	SMH-45	2.5mm <sup>2</sup> 5 Core Cable
CAD-60	1.5mm <sup>2</sup> 5 Core Cable	CAH-180	0.75mm <sup>2</sup> 5 Core Cable	RH60	1.5mm <sup>2</sup> 5 Core Cable	SMH-60	1.5mm <sup>2</sup> 5 Core Cable
CAD-90	0.75mm <sup>2</sup> 5 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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