
Repair Instructions - Oven Omron Controller Replacement



To suit: TD-80F - TD-700F, TO-30G, TO-150G, TOH-150F, TGD-80F - TGD-250F

Approvals		
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Safety Reminder

Before commencing any repair work on an electrical product, please check your local state/territory legislation in regards to suitable licencing/competences required to perform such work.

These instructions do not purport to address all potential safety issues, if any, associated with the product's use. It is the responsibility of the user of these instructions to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.

Before attempting any of the following, perform the actions listed below:

- Turn OFF power to the machine.
- Unplug the machine.

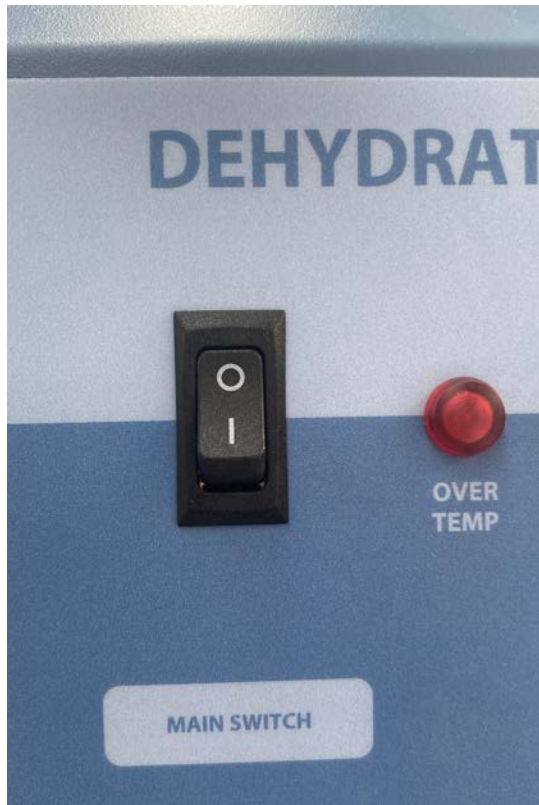
Summary

These instructions how to remove the old blower and air heater, and how to install the new fan and air heater.

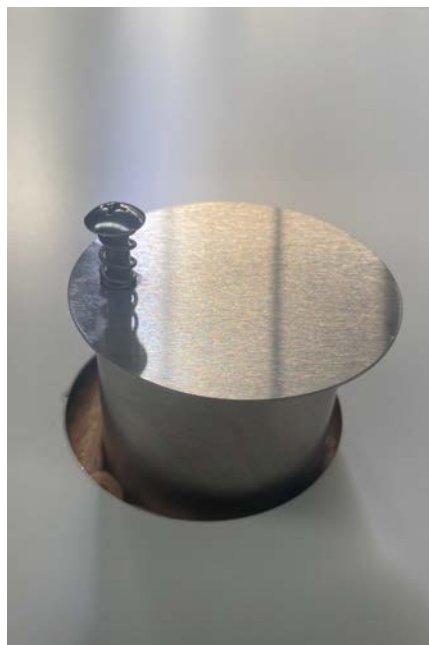
Tools Required	
Medium Philips Head Screw Driver	
Small Flat Head screw driver	

Kit Contents		
Item	Description	Quantity
61612	Omrron Conrtroller	1

Section 1: Preparation



Turn off the oven and disconnect the oven from power.



One top of the oven you will see the oven exhaust and intake ports. Unscrew the screws holding the covers of the ports and remove them. **Please note:** Some lab ovens only have one port.

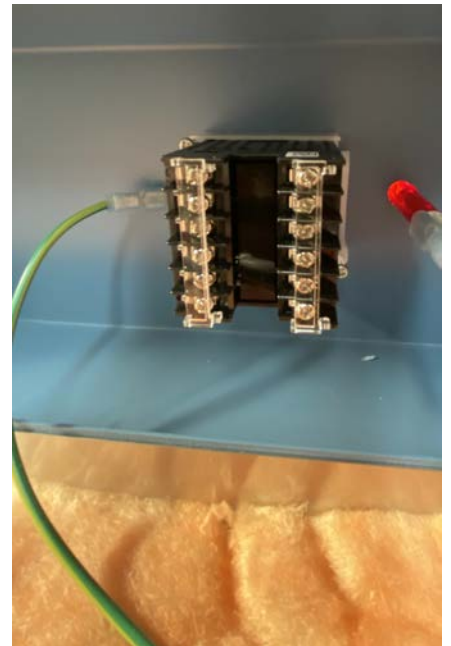
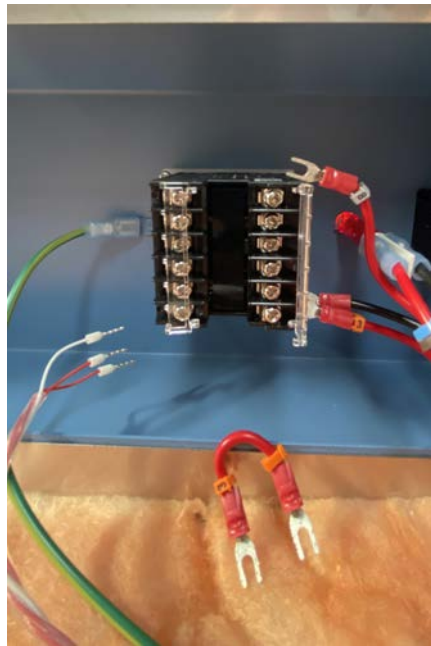
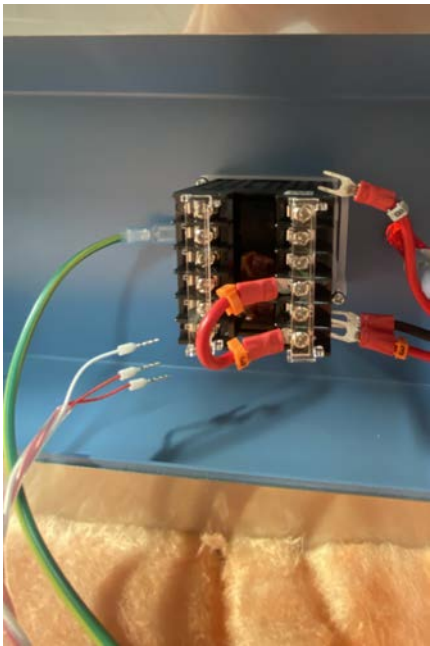
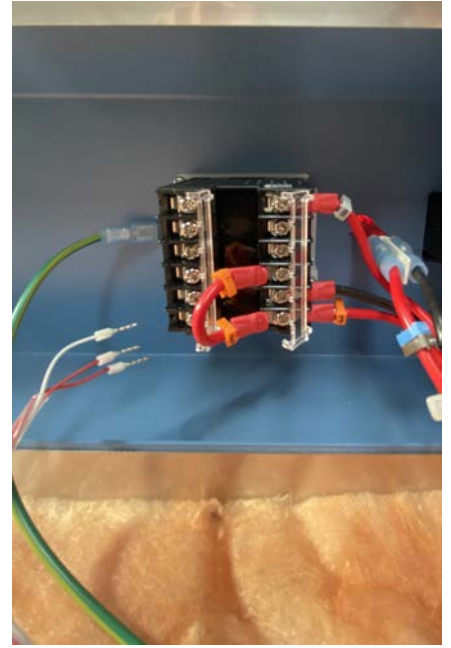
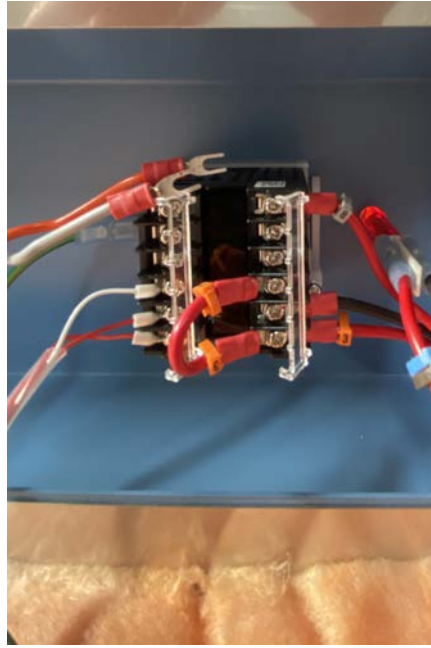
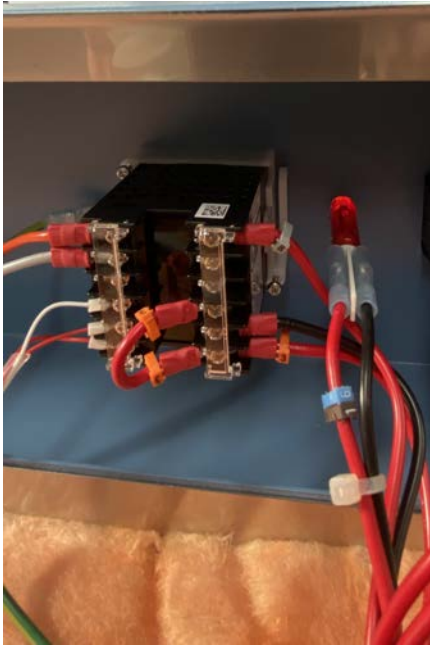


Unscrew the screws holding the top cover of the oven in place. There will be six in total; two on either side of the cabinet and two at the back of the cabinet.

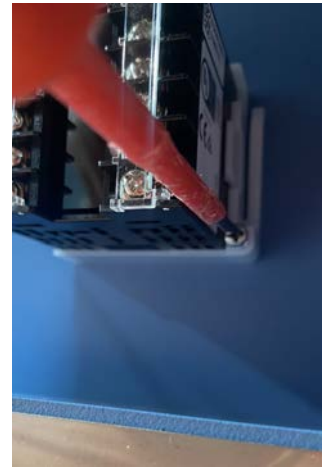


Once you unscrew these screws lift off the top cover and tilt it up. Located at the back of the oven cover on the underside (next to the rectangular vents) you will see a green and yellow earth wire connected via a spade clip. Remove this earth wire from the cover and then you will be able to remove cover. With the cover removed you will be able to access the Omron controller.

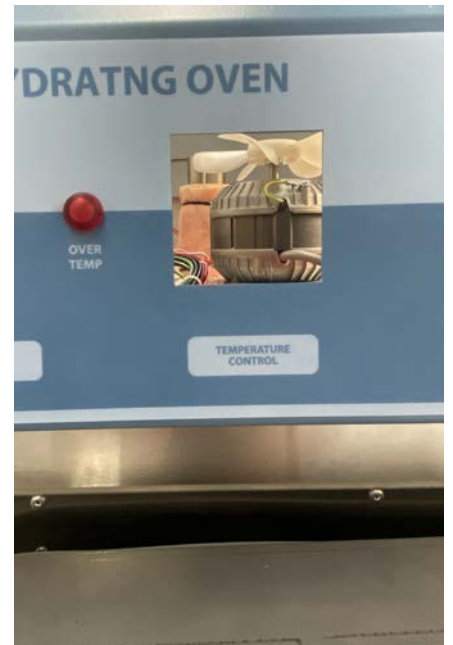
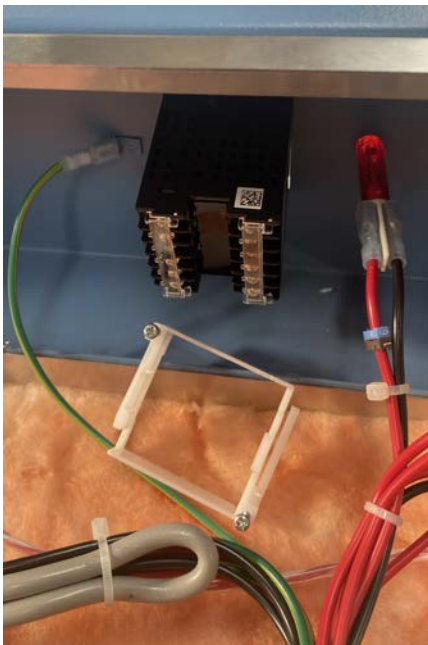
Section 2: Remove the Old Omron Controller



Disconnect the wires at the back of the controller, noting where each wire is located. Please note the included electrical diagram for wire connection locations.

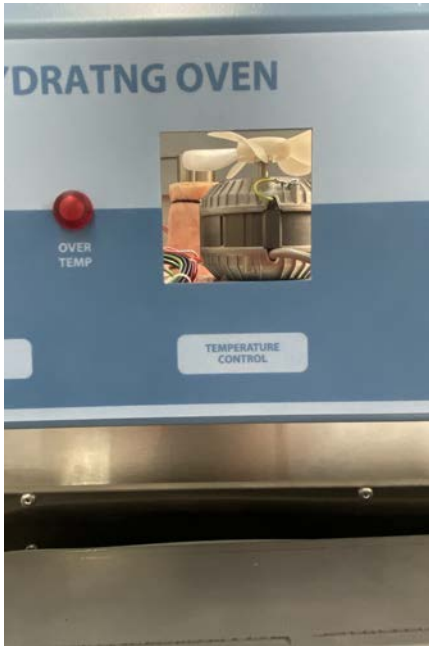


Once the wires have been removed, loosen the screws holding the white controller fixing bracket in place. The screws don't need to be completely removed from the bracket. Once loosened slide the bracket off.

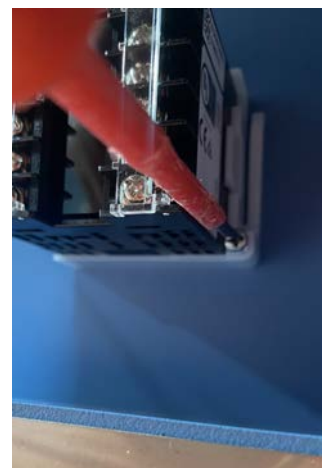
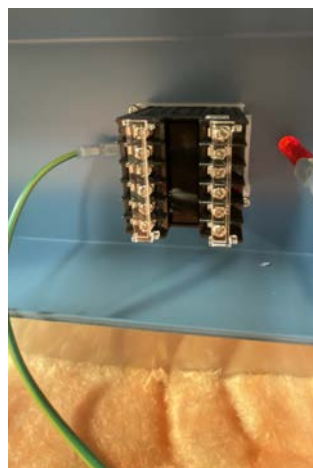
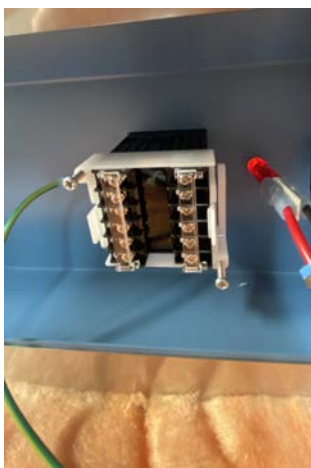


Once the bracket has been removed from the controller you can slide the controller out through the front face plate.

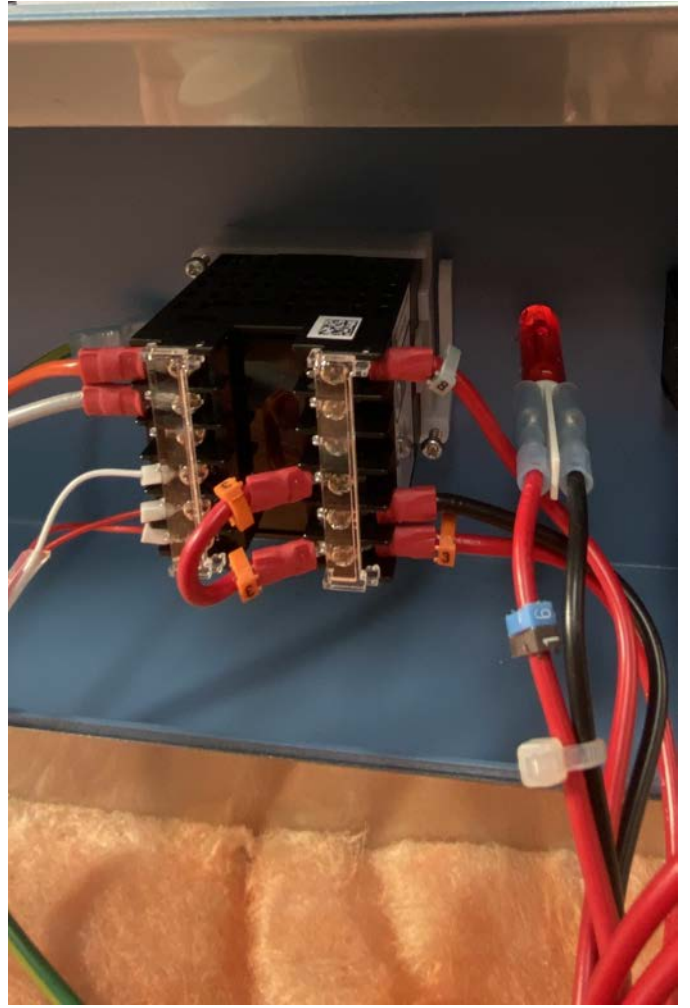
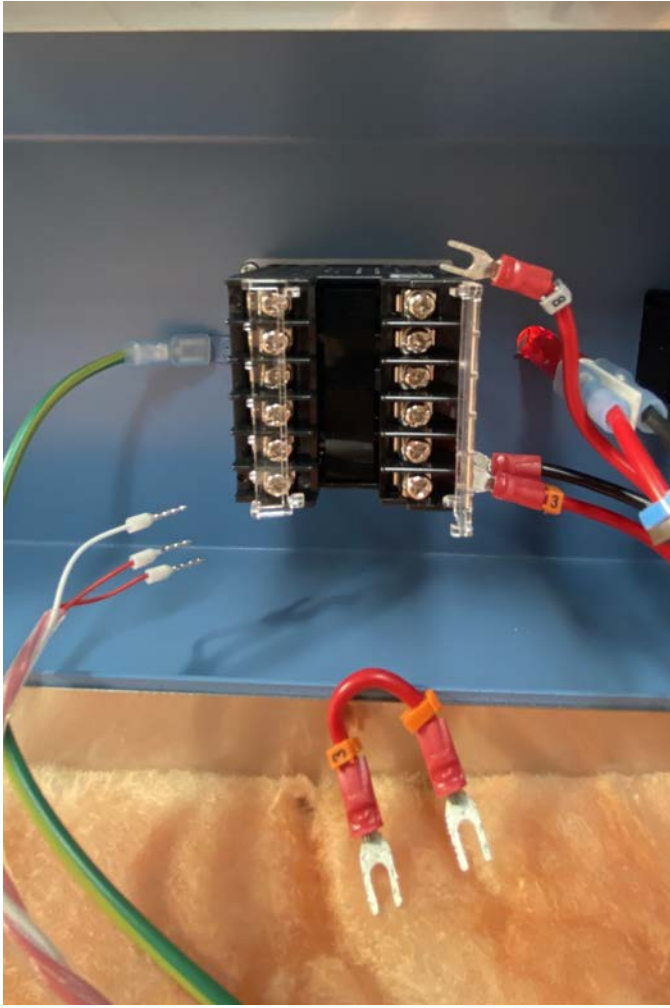
Section 3: Installation the new Omron Controller



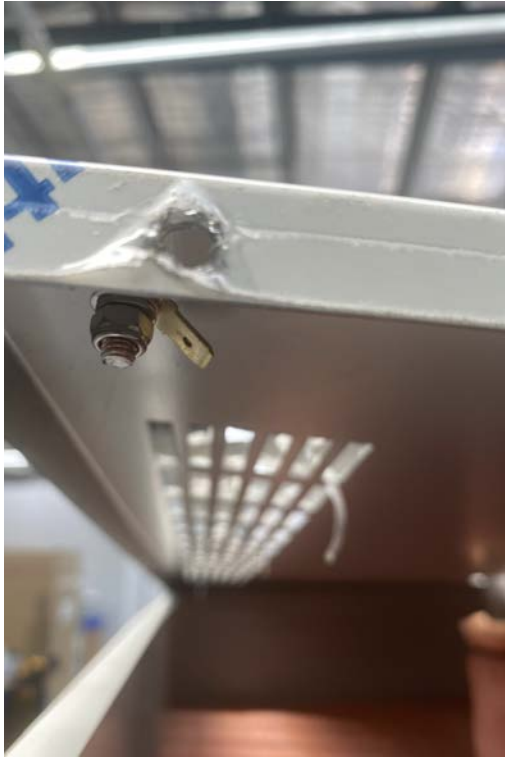
Slide the new controller into the front panel of the oven.



Replace the white fixing bracket and tighten the screws to hold the controller firmly in place.



Reinstall the wires back into the controller. Please note the included wiring diagrams in the guide.



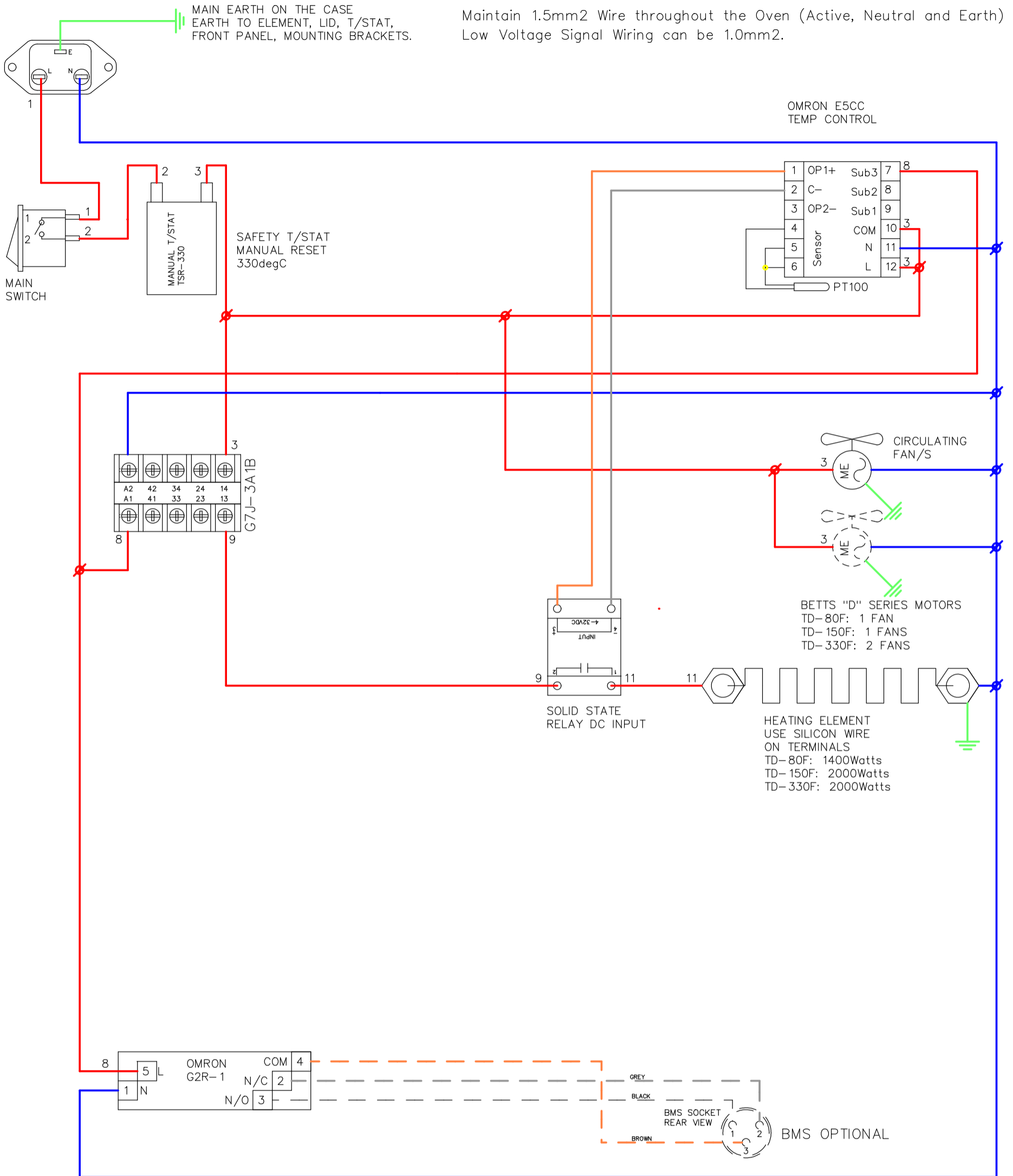
Once the Omron Controller has been installed, place the cover on top the oven and reattach the green and yellow earth wire to the spade clip to the spade terminal. Once the the earth wire has been connected, let the cover sit on to the oven and ensure that the screw holes of the cover are lined up with the cabinet. Screw the cover back into place.



Screw the covers of the inlet and the exhaust port back into place.

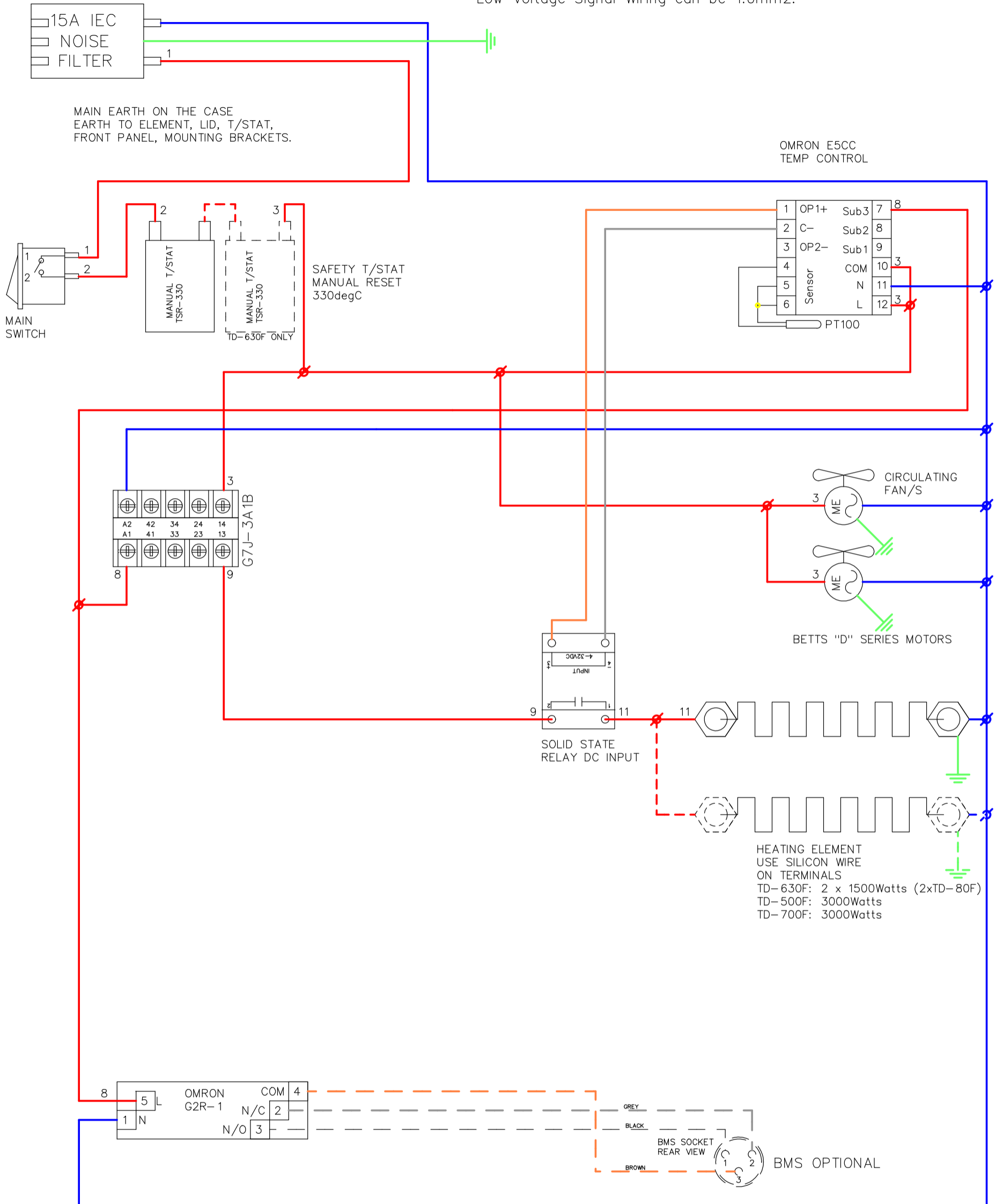
MAIN EARTH ON THE CASE
EARTH TO ELEMENT, LID, T/STAT,
FRONT PANEL, MOUNTING BRACKETS.

Maintain 1.5mm² Wire throughout the Oven (Active, Neutral and Earth)
Low Voltage Signal Wiring can be 1.0mm².



PRODUCT:	OVENS: DEHYDRATORS, STANDARD.	27-05-24: Removal of High Temp Indicating Light.
MODEL:	TD-80F, TD-150F & TD-330F	14-04-20: Changed to Omron G7J and G2R. Introduced TD-80F
DRAWING No:		12-07-18: Changed location of Safety T/Stat & Changed BMS wire colour.
DESCRIPTION:	WIRING DIAGRAM FOR STANDARD SIZE DEHYDRATING OVENS, TD-80F, 150F & 330F	1-3-17: Replaced adjustable thermostat with fixed manual reset type.
ISSUE DATE:	27-05-24	13-2-13. Replaced 3216 control with Omron E5CC temperature control

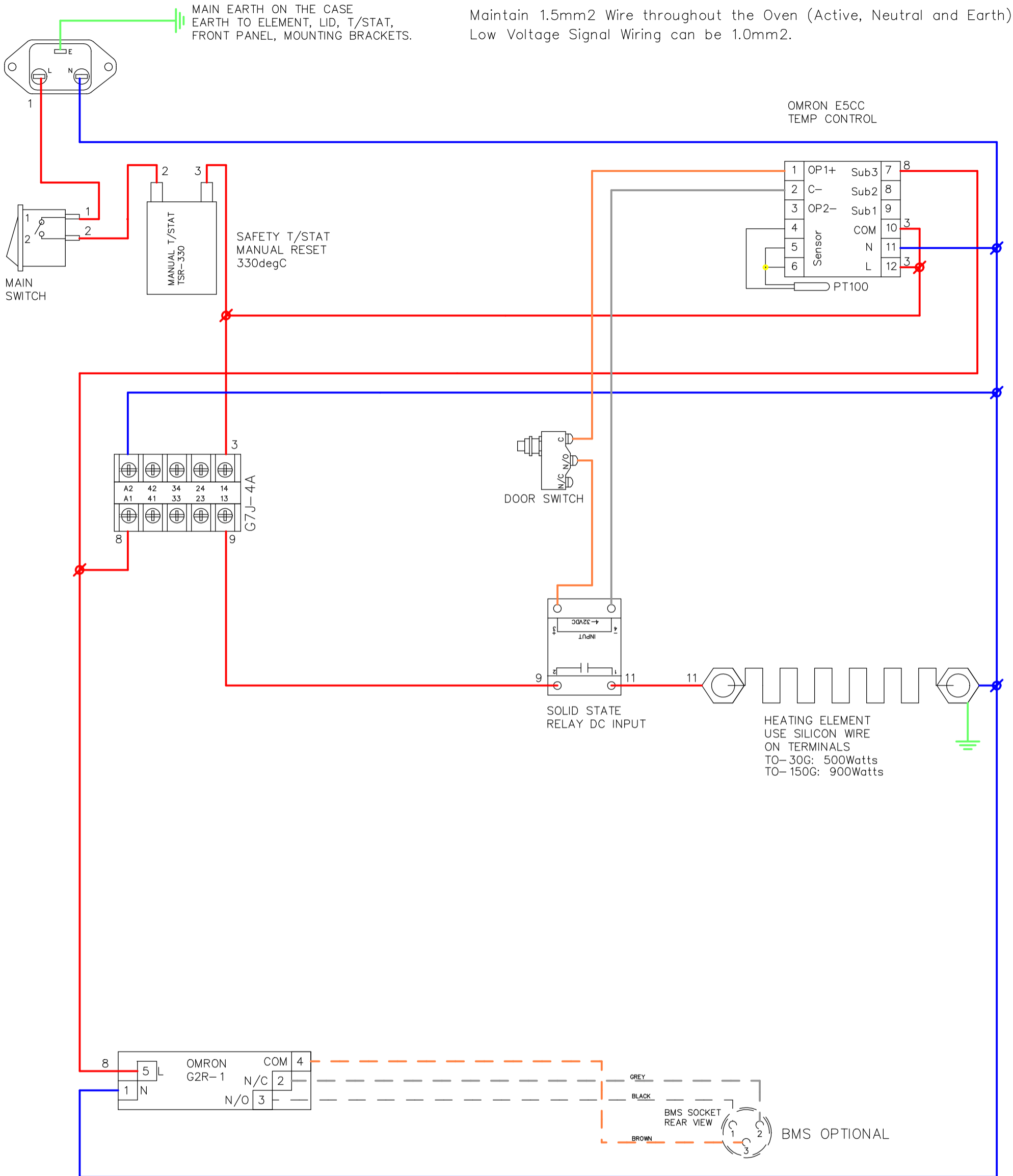
Maintain 1.5mm² Wire throughout the Oven (Active, Neutral and Earth)
 Low Voltage Signal Wiring can be 1.0mm².



PRODUCT:	OVENS: DEHYDRATORS, STANDARD.	27-05-24: Removal of High Temp Indicating Light
MODEL:	TD-500F, TD-630F & TD-700F	25-04-21: Introduced TD-630F (Two Door Oven)
DRAWING No:		14-04-20: Changed to Omron G7J and G2R.
DESCRIPTION:	WIRING DIAGRAM FOR STANDARD SIZE DEHYDRATING OVENS (15AMP)	12-07-18: Changed location of Safety T/Stat & Changed BMS wire colour.
ISSUE DATE:	27-05-24	1-3-17: Replaced adjustable thermostat with fixed manual reset type.

MAIN EARTH ON THE CASE
EARTH TO ELEMENT, LID, T/STAT,
FRONT PANEL, MOUNTING BRACKETS.

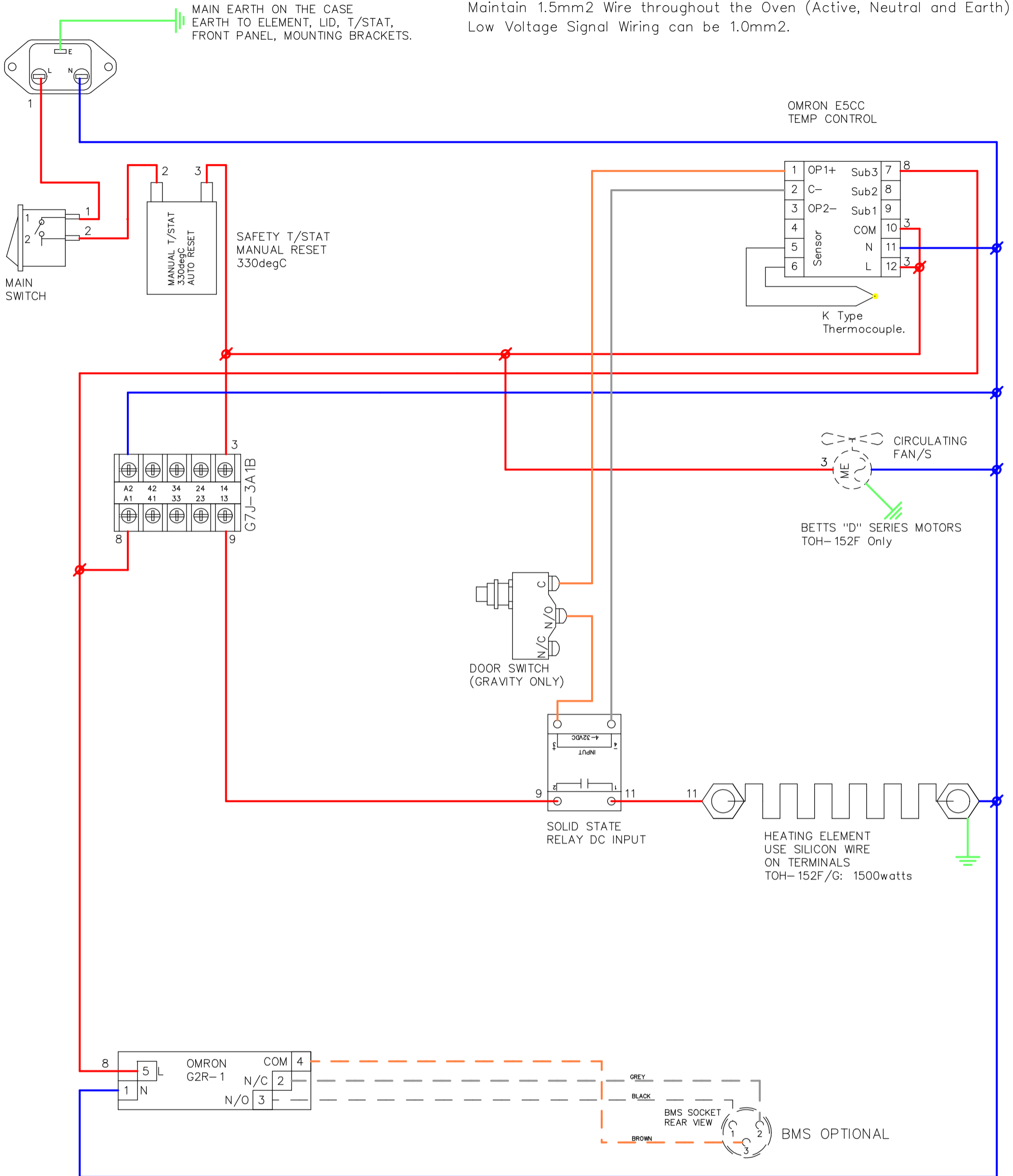
Maintain 1.5mm² Wire throughout the Oven (Active, Neutral and Earth)
Low Voltage Signal Wiring can be 1.0mm².



PRODUCT:	OVENS: DEHYDRATORS, STANDARD.	
MODEL:	TO-30G & TO-150G	
DRAWING No:		27-05-24: Removal Of High Temp Indicating Light
DESCRIPTION:	WIRING DIAGRAM FOR STANDARD SIZE STATIC OVEN, TO-30G & TO-150G	24-11-21: Added Door Switch to prevent nuisance tripping of Safety T/Stat
ISSUE DATE:	27-05-24	06-05-20: Changed to Omron G7J and G2R. Introduced TO-30G

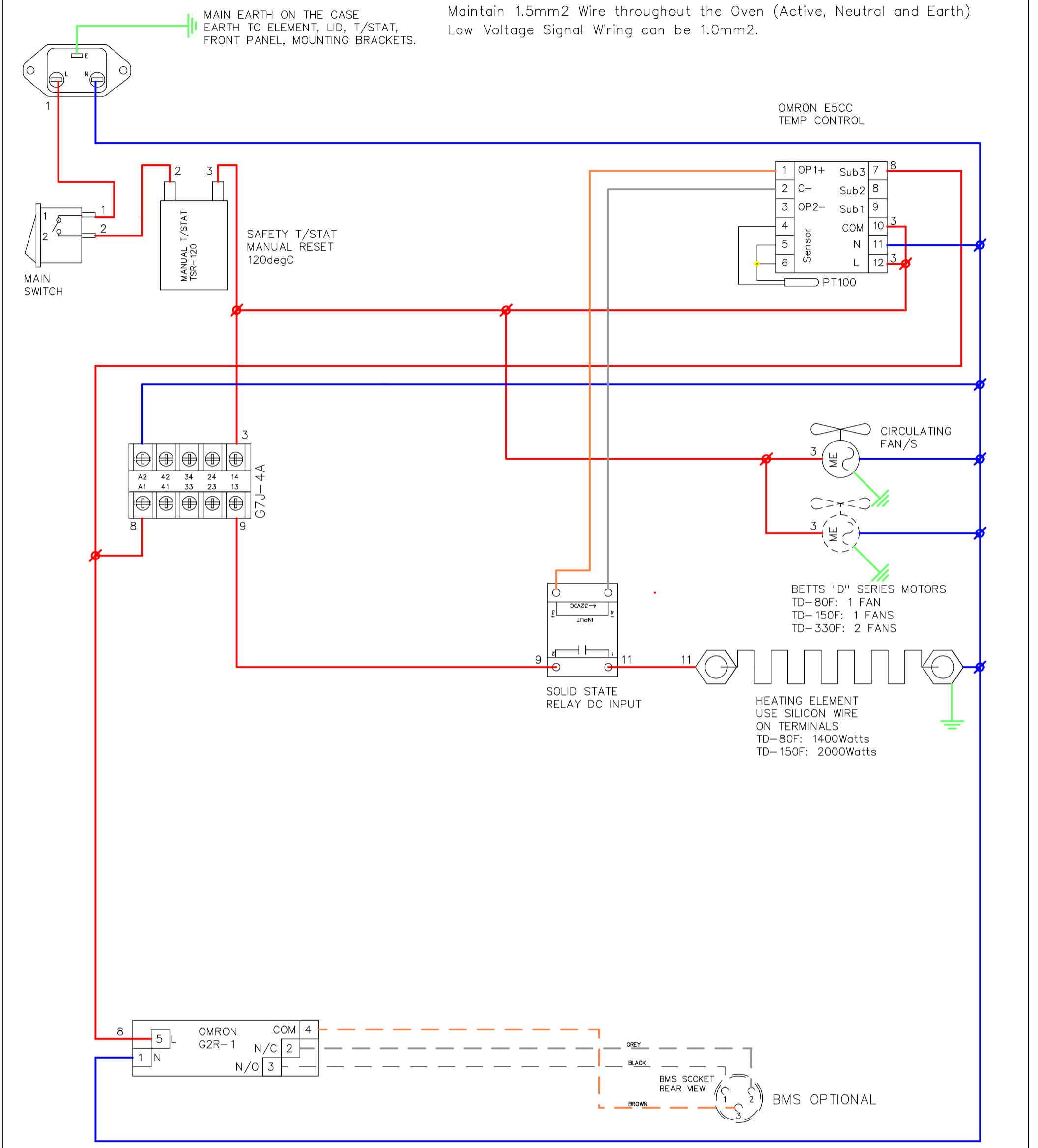
MAIN EARTH ON THE CASE
EARTH TO ELEMENT, LID, T/STAT,
FRONT PANEL, MOUNTING BRACKETS.

Maintain 1.5mm² Wire throughout the Oven (Active, Neutral and Earth)
Low Voltage Signal Wiring can be 1.0mm².



PRODUCT:	OVENS: DEHYDRATORS, STANDARD.	
MODEL:	TOH-152 (F/G)	
DRAWING No:		27-05-24: Removal of High temp Indicating Light.
DESCRIPTION:	WIRING DIAGRAM FOR STANDARD SIZE HIGH TEMP OVENS, TOH-152F or 152G	24-11-21: Added Door Switch to Gravity Oven to prevent nuisance tripping of Safety T/Stat
ISSUE DATE:	27-05-24	15-09-20: Changed to Omron G7J and G2R.

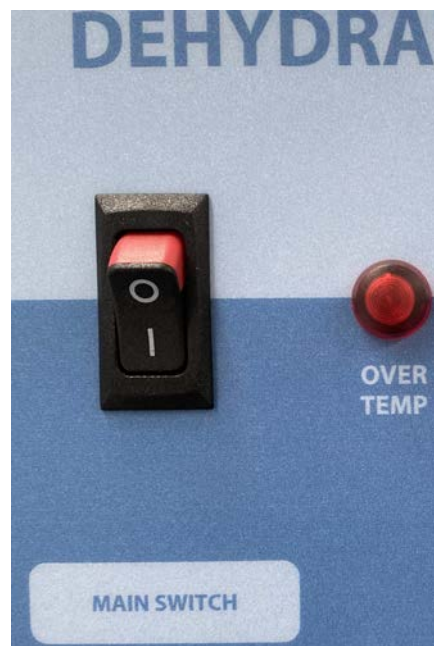
Maintain 1.5mm² Wire throughout the Oven (Active, Neutral and Earth)
 Low Voltage Signal Wiring can be 1.0mm².



PRODUCT:	OVENS: DEHYDRATORS, STANDARD.	27-05-24: Removal Of High Temp Indciating Light.
MODEL:	TGD-80F & TGD-250F	05-07-21: Introduced Glassware Dryer. Use 120degC Safety Thermostat, Max. 80degC Operating Temp.
DRAWING No:		14-04-20: Changed to Omron G7J and G2R. Introduced TD-80F
DESCRIPTION:	WIRING DIAGRAM FOR STANDARD SIZE GLASSWARE DRYER	12-07-18: Changed location of Safety T/Stat & Changed BMS wire colour.
ISSUE DATE:	05-07-21	1-3-17: Replaced adjustable thermostat with fixed manual reset type.

Section 4: Power ON

Connect the oven back to power. Turn the oven on and ensure it is operating correctly.



Section 5: Support and Contact

Repair and Support is available over the telephone Monday through Thursday from 8:30am to 4pm and Friday 8:30am to 2pm. Please contact service@thermoline.com.au for email technical support.

You can also visit our website at www.thermoline.com.au for access to additional useful troubleshooting guides, operating manuals, and technical information.

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