

240V/24V CONTROL TRANSFORMER
ADDED TO HEATER UNIT

THESE PROVIDE POWER TO THE "NEST"
CONNECTS TO ALL THE HEAT/COOL RELAYS
(i.e. RELAY COMMON)

SWITCH CLOSURE BETWEEN "R" AND "W"
THIS IS A.C. SO SCR OR TRIAC WILL NOT WORK.
MUST BE BACK-TO-BACK MOSFET OR MECHANICAL RELAY
(TRIAC/SCR WILL LATCH-UP AND NEVER SWITCH OFF)

ADDITIONAL WIRES IN THERMOSTAT CABLE
TRIMMED BACK AT FURNACE,
CONNECTED AT NEST.

- R Red
- Rc Red
- Rh Red
- C Blk/Blu
- W White
- E Brown
- Y Yellow
- Y2 Yellow
- G Green
- O Orange
- B Blue
- A
- L
- X
- P

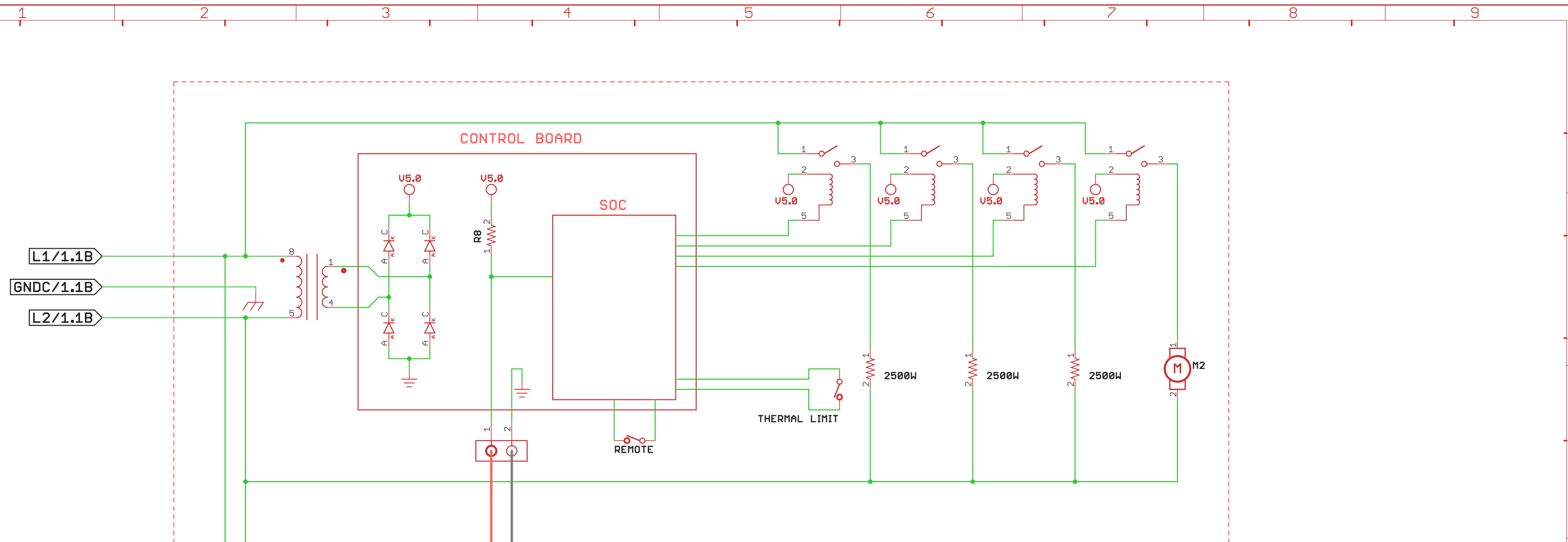
- Power, 24 Vac transformer
- Power from cooling, 24 Vac transformer
- Power from heat, 24 Vac transformer
- Common of 24 Vac transformer
- Primary heat call relay
- Emergency heat relay
- Primary cool call relay
- Secondary cool call relay
- Fan relay
- Change-over relay to cool relay
- Change-over relay to heat relay
- Heat and cool active to any relay
- Emergency heat active lamp
- System malfunction lamp
- Defrost control lamp

Drawn	W.ROBISON	Date	2020/12/09
Designed	W.ROBISON	Date	2020/12/09

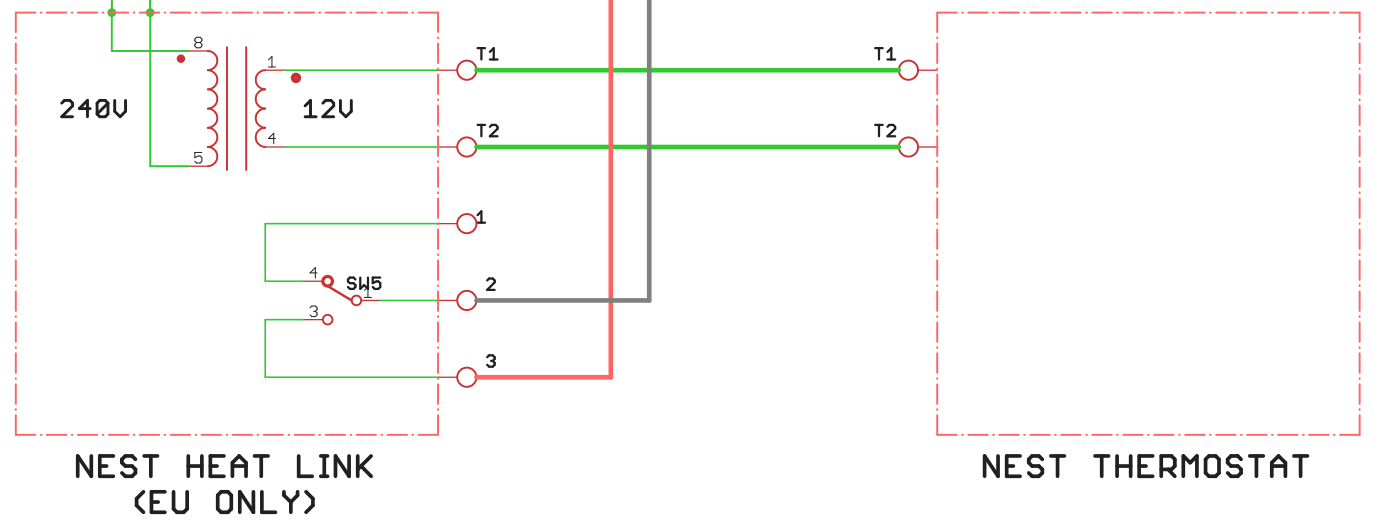
TITLE: 7500W FURNACE THERMOSTAT				A102_73193	
CAGE	Series	FURNACE	Number	Rev	
2D354	102	B	73193	0	

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The University of Iowa
Department of Physics & Astronomy
Iowa City, IA, USA



- R Red Power, 24 Vac transformer
- Rc Red Power from cooling, 24 Vac transformer
- Rh Red Power from heat, 24 Vac transformer
- C Black/Blue Common of 24 Vac transformer
- W White Primary heat cell relay
- E Brown Emergency heat relay
- Y Yellow Primary cool call relay
- Y2 Yellow Secondary cool call relay
- G Green Fan relay
- O Orange Change-over relay to cool relay
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- A Heat and cool active to any relay
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