

*Thermador*

# **SEC, SECD, SEM, SEMW, C & CM Wall Ovens**



# **Introduction**

- Features
- Operation
- Model Numbers
- Warranty
- Component Description
- Error Codes
- How the Oven Works
- Hints & Tips



# Features...

Three styles are available...

SE



C



PRO



## Features...

**Meat probe** included in every oven, S, C, CM and Pro

- New meat probe socket without cover

**New Telescopic Rack** ( C oven only), full extension goes all the way out of the oven.

- Max. static load capacity of 48.5lbs
- Typical dynamic load capacity is 35 lbs

## **New halogen lighting**

- Increased visibility of foods; forward lighting directs light on to the top of the food for easier cooking control in terms of checking for doneness.



## **Features...**

- New extra large oven cavity
- New fast preheat on every oven (8 min. max to 350 deg. F).
- New concealed bake element on every oven
- New self glide hinges
- New cooking modes: up to 16
- More robust broiler pan – porcelain grill for easier cleaning.
- Enhanced door/hinge system – softer opening & closing.

## Features.... New Control Panel



- With “one touch access”, all the cooking modes are available at the touch of a finger. In addition all cooking modes are visible.
- 16 digit alpha numeric scrolling display to assist in programming the oven, to guide user and provide status and feedback.

## **Features...New for the SEC and SECD Ovens**

- Dedicated keys for Upper light, Lower light, and Start – upper and lower lights independently controllable for maximum flexibility
- Introduction of a 27” single convection oven.
- Larger window: Viewing area on all 27” ovens increased by 7% for greater access to foods.
- Meat probe for temperature – based automatic cooking.

## Features...New for the C Ovens

- Dedicated keys for Upper light, Lower light, and Start – upper and lower lights independently controllable for maximum flexibility
- New modes including Fast Preheat and Warm.
- Larger window: Viewing area
- Wider more robust handle
- New broil element design  
10 pass broil element to cook greater surface evenly



## Features...New for the CM Ovens

- More modes including Fast Preheat, Warm, Defrost and CookSmart 5 (for frozen foods).
- Dedicated Upper and Lower Oven Light keys.
- More robust handle.
- Larger viewing area on the door.

Viewing area has increased  
10.7%



## Features...New for the SEM/SEMW Ovens

- New trim
- New 30" SEM AND SEMW line.
- Full 30" cavity on the warming drawer of the SEMW30 for increased capacity to hold dishes and food.
- Pro handles on the 27" SEM.



# Operation...Touch Panel - left side

UPPER OVEN	LOWER OVEN	TIMER 1	TIMER 2	SELF CLEAN
OVEN LIGHT	OVEN LIGHT	TIMER 1 OFF	TIMER 2 OFF	CLOCK TIME
OVEN Off	OVEN OFF	PANEL LOCK	CLOCK	STOP TIME



# Operation...Touch Panel - right side

FAST PREHEAT

CONVECTION

PROBE

BAKE

CONVECTION BAKE

WARM

ROAST

CONVECTION ROAST

PROOF

BROIL

CONVECTION BROIL

DEHYDRATE



# Operation...Thermostat Calibration (changing the offset)

## Single or Upper Oven...

Turn off the oven.

Touch and hold the **START** pad and then touch the **BAKE** pad.

A “0” will appear in the display, release all pads. Touch **BAKE** and 0 changes in 5 degree increments each time it is touched.

The maximum adjustment is + or – 35 degrees F. Touch **BAKE** to complete the change.

## Lower Oven...

Same as above, except instead of the **BAKE** pad, touch **ROAST**.

Note: A change in the calibration does not affect Dehydrate, Proof or Warm modes.



## **Operation...Voltage change option**

The oven has been preset for 240 VAC operation, if the residence has 208 VAC the oven voltage can be changed during installation.

To change the oven voltage proceed as follows:

Make sure that the oven, (ovens) is turned off.

Touch and hold the **START** pad and the **SELF CLEAN** pad at the same time for 3 seconds.

“240” appears in the display, release both pads.

Touch the **SELF CLEAN** pad, “240” is replaced with 208. This alternates each time **SELF CLEAN** is touched.

To complete the change, touch **START**

## **Operation...Fahrenheit to Celsius**

The oven has been preset to show Fahrenheit temperature displays.

To change to Celsius, follow these steps:

Turn off the oven, (ovens).

Touch and hold the **START** pad and the the **CONVECTION** pad at the same time for 3 seconds.

“**F**” will appear in the display, release both pads.

Touch **CONVECTION** “**F**” is replaced with “**C**”. This alternates each time **CONVECTION** is touched.

To complete the change touch **START**

## Model and FD # Location

Open the oven door and the model and FD# are located on the right hand side of the unit, inside the grill area. When using the model and FD #s for a warranty call, write down the complete model number including service code, and the FD # minus the FD. Example: model # C27230BW/01 FD # 8211XXXXX



# **Warranty**

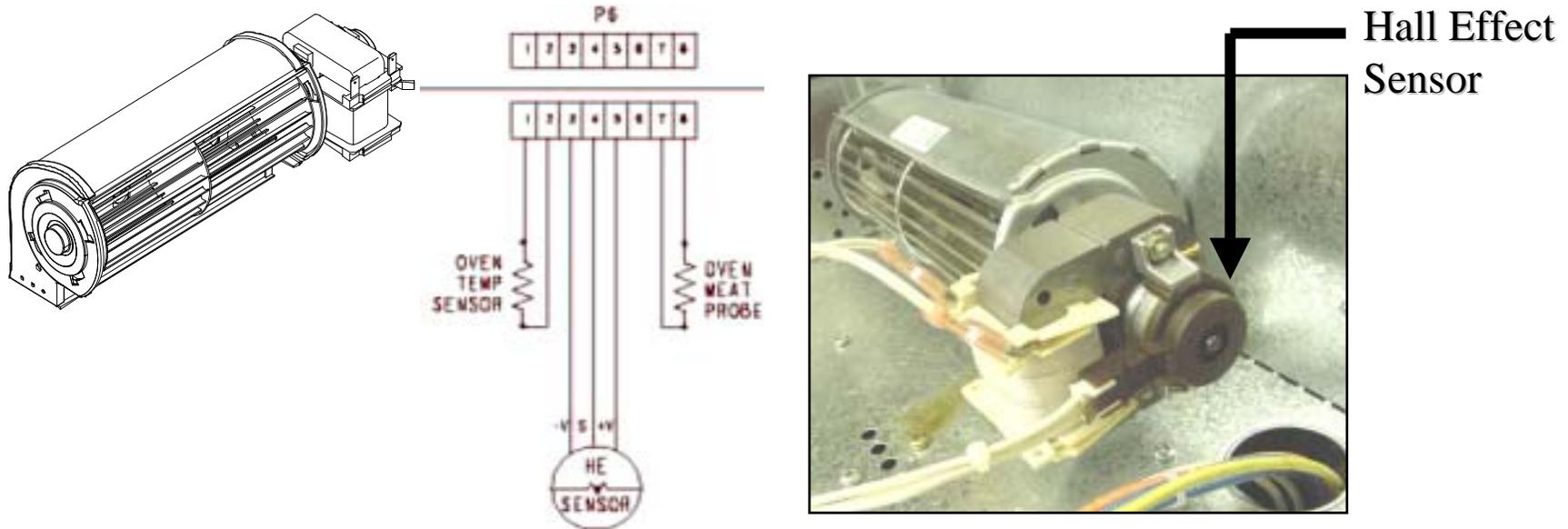
1 Year Parts & Labor from date of installation or purchase.

Service must be performed by a BSH authorized service professional.

## **Extended Warranty:**

CM Units: A further 4 years on the magnetron tube (part only).  
Labor is the responsibility of the consumer.

## Component Description...Cooling Motor with Hall Effect Sensor (measures revolutions of motor)

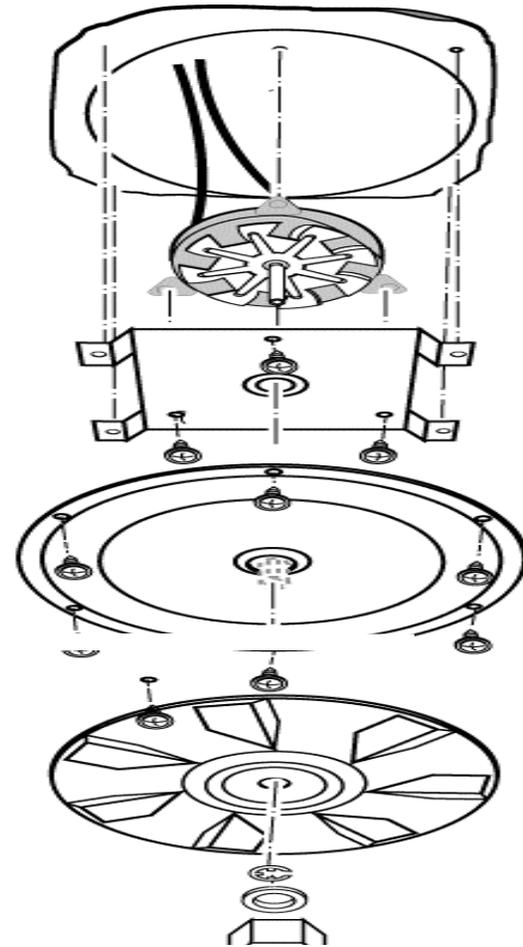


Hall Effect Sensor replaces the air switch as the method of verifying air flow. The sensor is part of the motor assembly and is not supplied as a separate part.

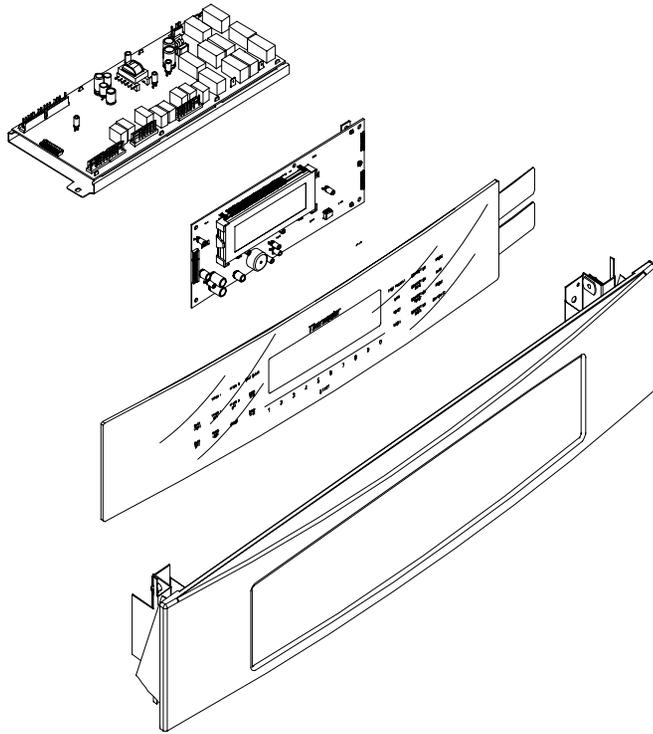
Relay Board supplies 18 VDC across  $-V$  &  $+V$  terminals of sensor and 2VAC can be measured between ground and terminal "S" at P6 or P7 at the relay board when sensor and motor are operating correctly

## Component Description...Convection Motor Fan

- Operates during any convection mode
- The fan turns off if the door is opened
- The convection fan will also run during the pre-heat time
- Runs during dehydrate
- Controlled by relay from board
- Using convection baking modes usually allows the oven temperature to be reduced by 25 degrees F.



# Component Description...Electronics



Common Relay Board, Display Head & Touch Sensor Panel used for the “S”, “C” & CM series, means reduced inventory and more familiarity with operation.

## **How the Oven works...Bake Circuit...Pre-Heat**

Touch **UPPER OVEN**, touch **BAKE**, default temp. of 350 degrees shows in display. Touch **START**, the following actions take place:

**K15** relay closes sending 120 VAC from L2 to **Cooling Motor** Hall Effect sensor receives 18 VDC across -V & +V from P6, if motor is running correctly 2 VAC is received back at P6 from "S" verifying cooling circuit.

**K14** relay closes sending 120 VAC from L2 to **Convection Motor**

Temperature sensor measuring approx. 1078 ohms (at room temp.) connected to the relay board at **P6** calls for heat.

**K2** & **K0** relays close for 15 secs. Supplying 120 VAC from L2 to the Bake & Convection elements, in addition **K4** & **K5** relays close supplying 120 VAC from L1 through the HTC to the same two elements and heating takes place.

After 15 secs. **K4**, **K2**, & **K0** open, and **K1** closes supplying 120 VAC from L2 to the bake element for 45 secs., in addition **K5** remains closed supplying 120 VAC from L1 to the Bake element. This sequence of 15 secs. Broil and Convection followed by 45 secs. Bake, continues until pre-heat temperature is reached.

## Hints & Tips....

**F24 OR F25** appears in the display window.

**Probable Cause:**

This is caused by close contact to the control panel for more than 60 seconds, such as someone leaning against the controls or objects hanging in front of controls.

**Solution:**

Touch **OVEN OFF**, or turn power off at the circuit breaker, wait 3 minutes and turn it back on. If condition persists see error code information.

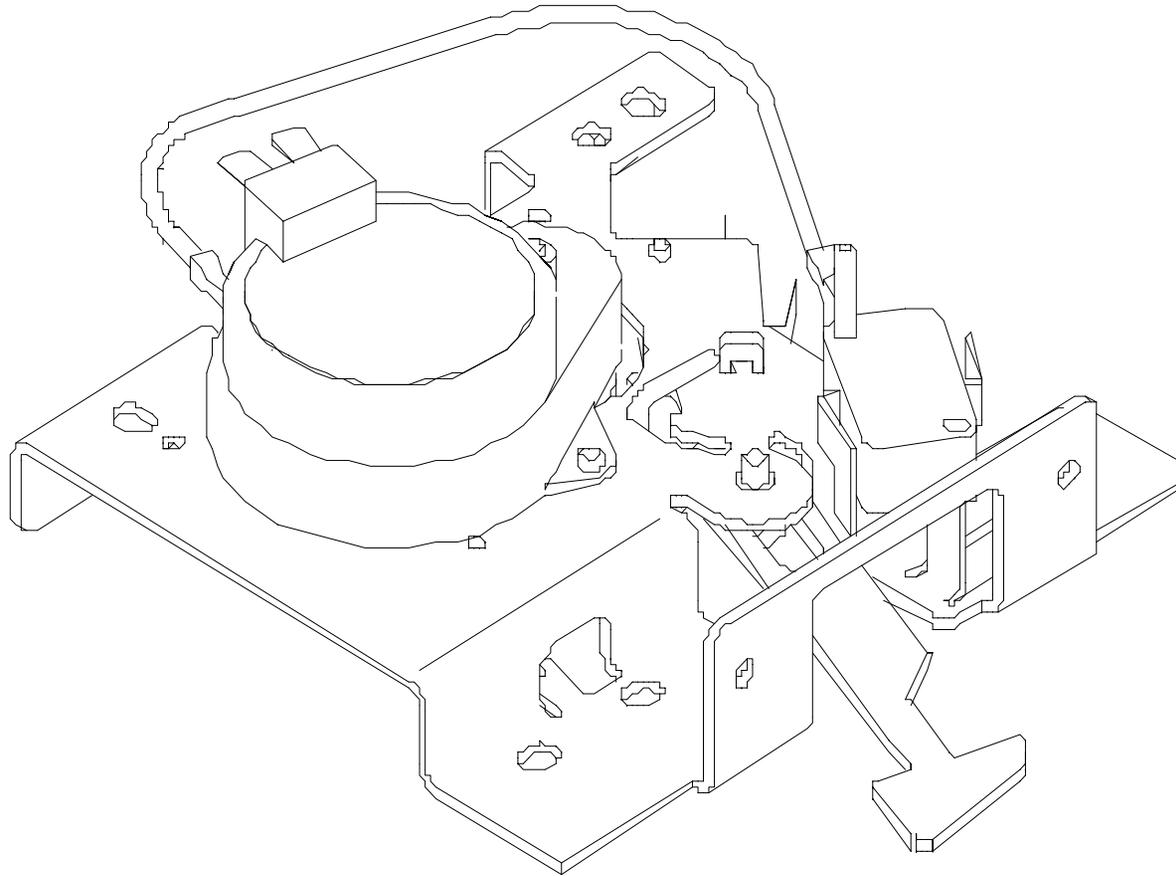
**Sab** appears in the display window.

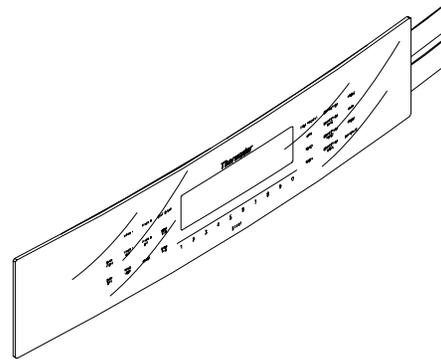
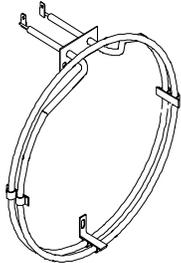
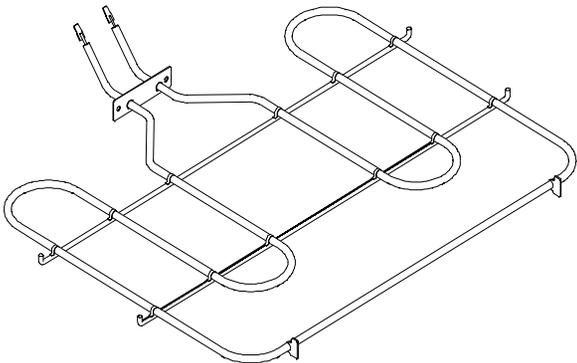
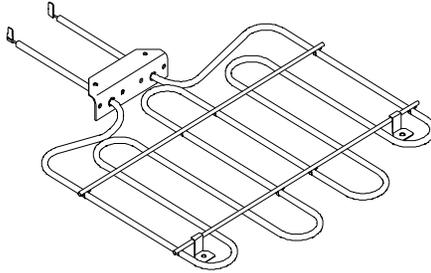
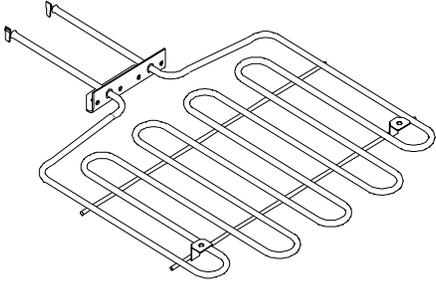
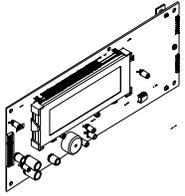
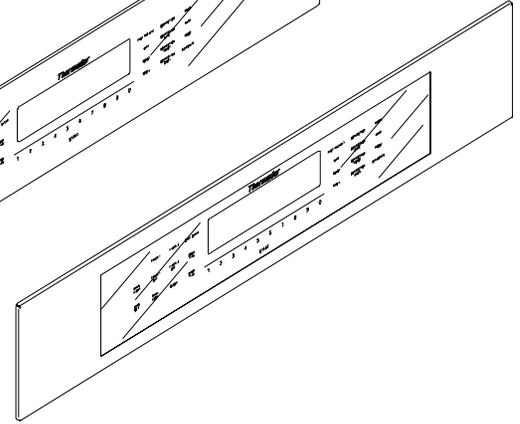
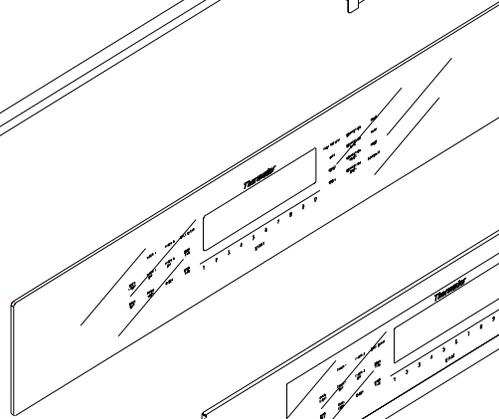
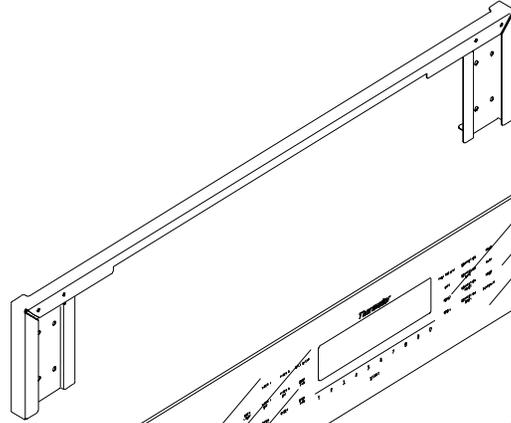
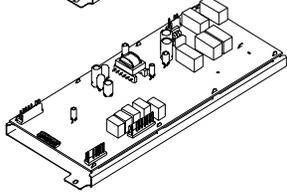
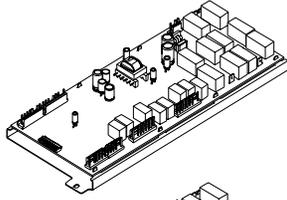
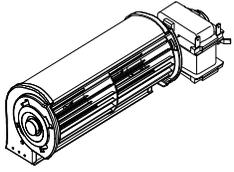
**Probable Cause:**

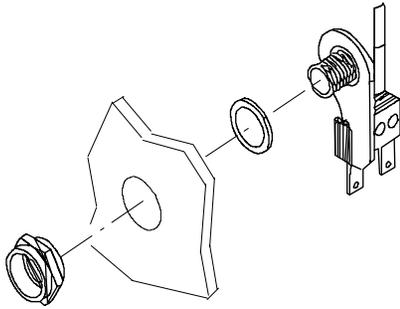
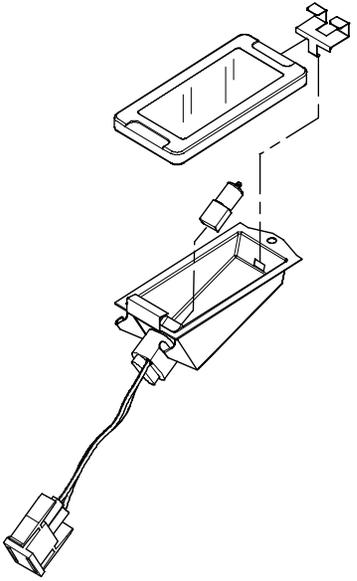
**Sabbath Mode** accidentally selected.

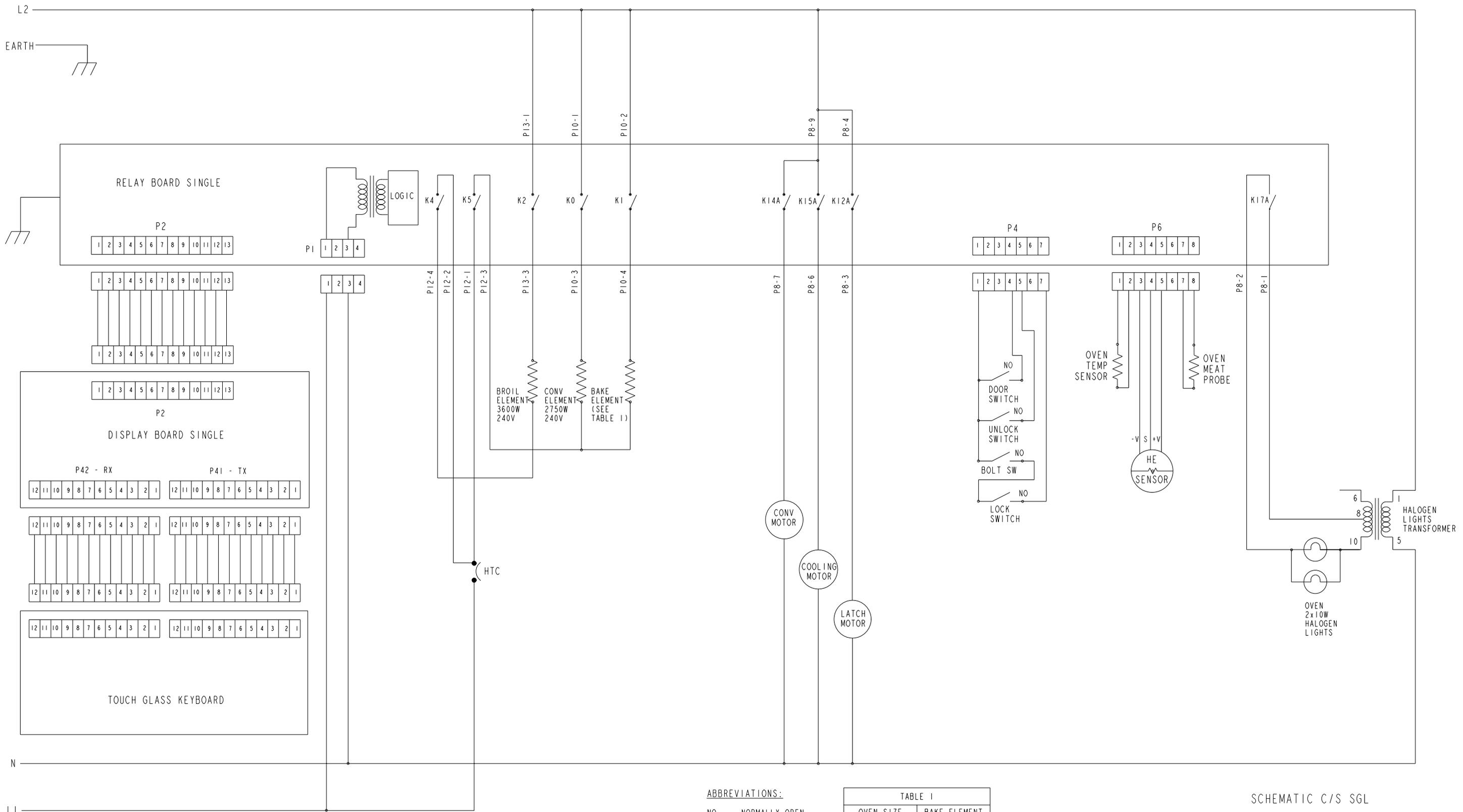
**Solution:**

Turn off the oven selected by touching **OVEN OFF**









1. SWITCH POSITIONS SHOW OVEN IN IDLE.  
 NOTES:

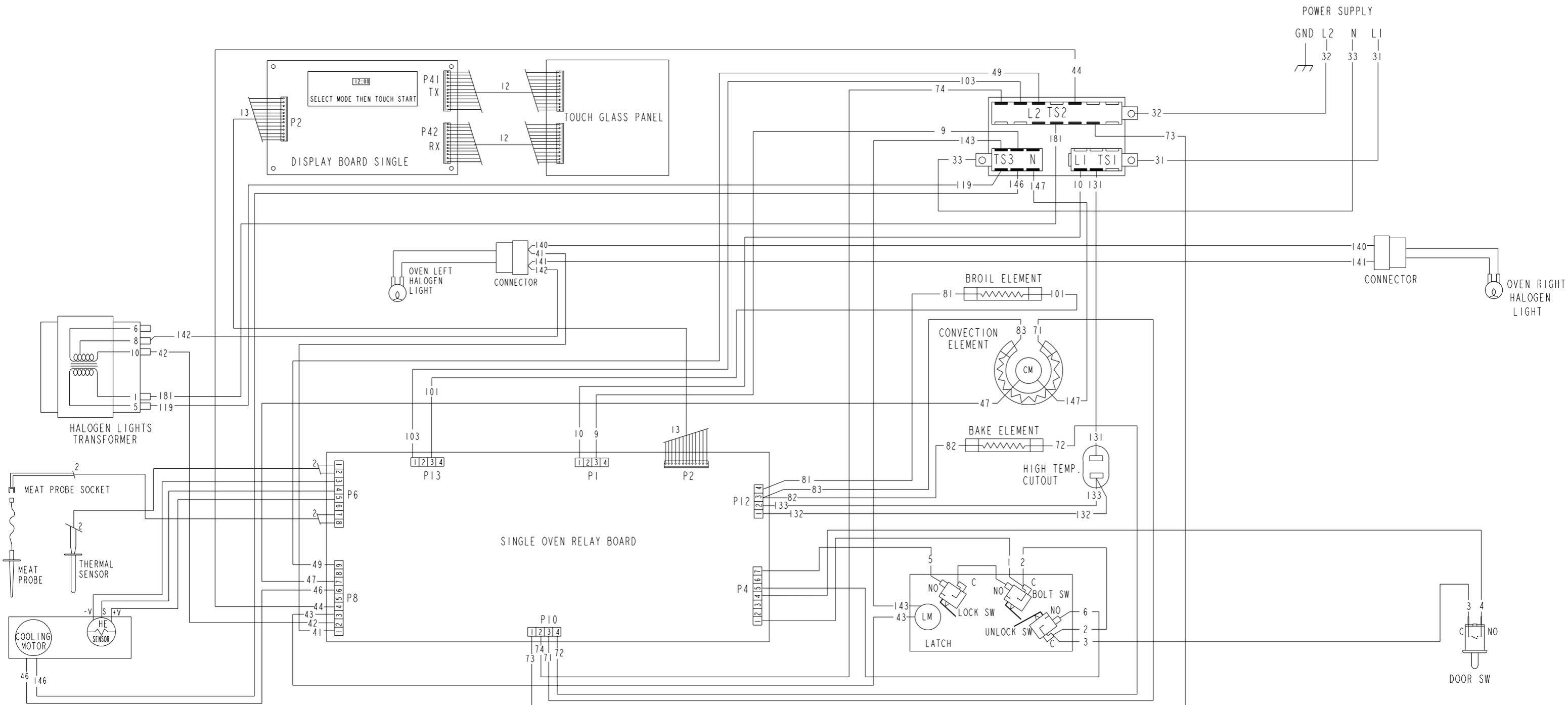
ABBREVIATIONS:  
 NO - NORMALLY OPEN  
 HTC - HIGH TEMP CUTOUT  
 HE - HALL EFFECT

TABLE 1	
OVEN SIZE	BAKE ELEMENT
27"	2200W 240V
30"	2300W 240V

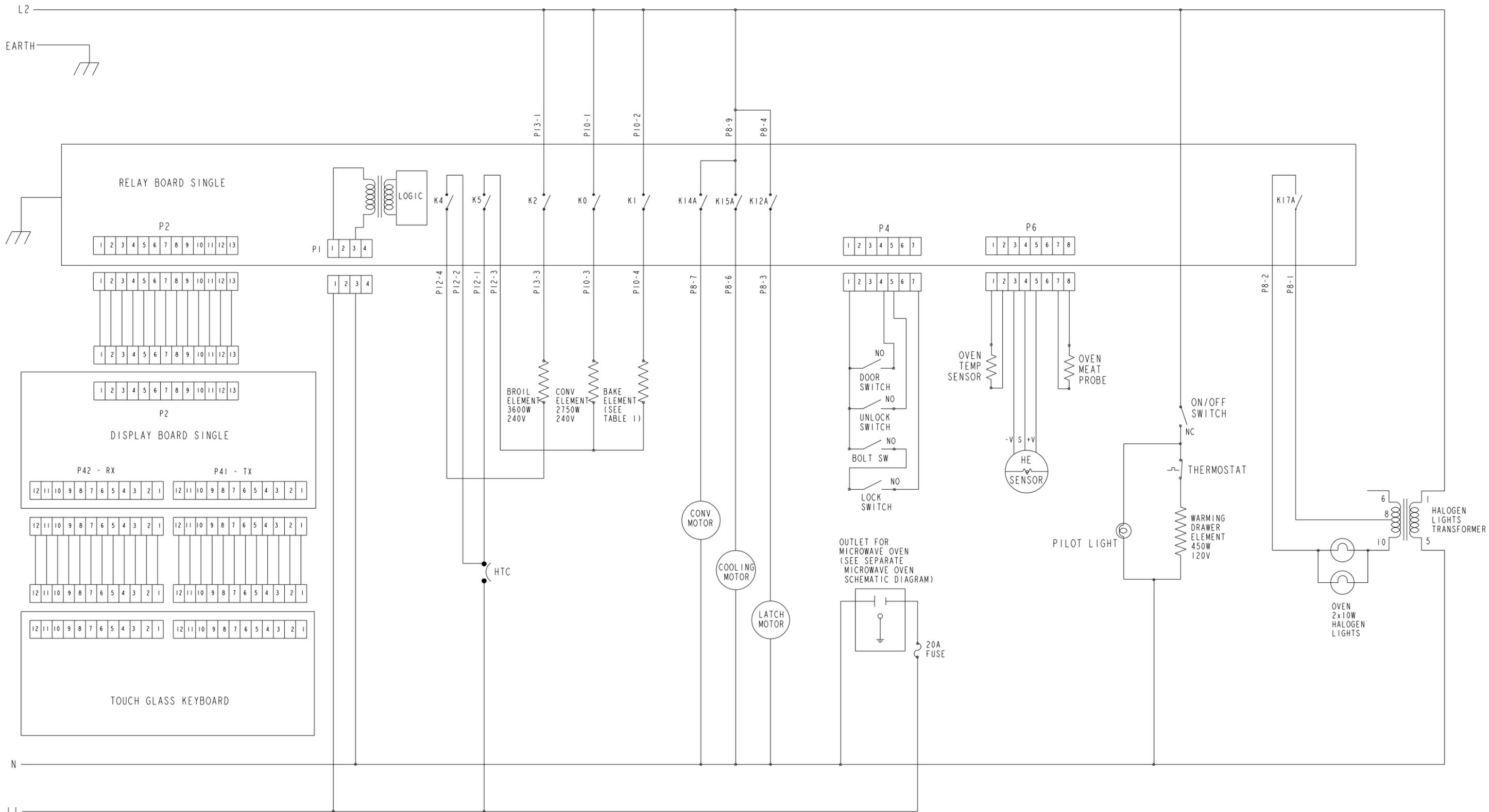
SCHEMATIC C/S SGL



5020010565	



5020010565	



1. SWITCH POSITIONS SHOW OVEN IN IDLE.

NOTES:

**ABBREVIATIONS:**

- NO - NORMALLY OPEN
- NC - NORMALLY CLOSED
- HTC - HIGH TEMP CUTOUT
- HE - HALL EFFECT

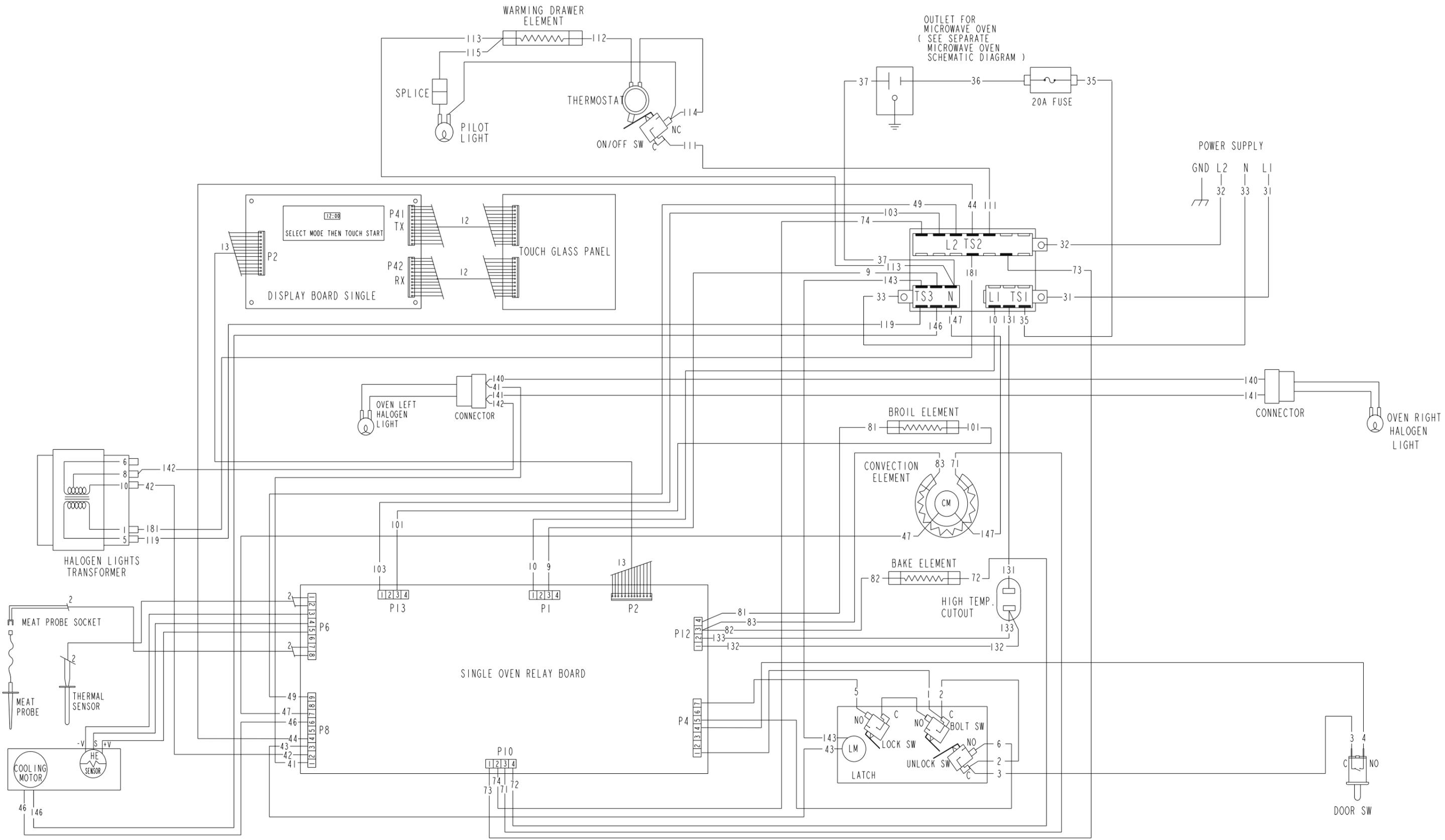
**TABLE I**

MODEL	BAKE ELEMENT
SEMW 27	2200W 240V
SEMW 30	2300W 240V

SCHMATIC SEMW REV. A



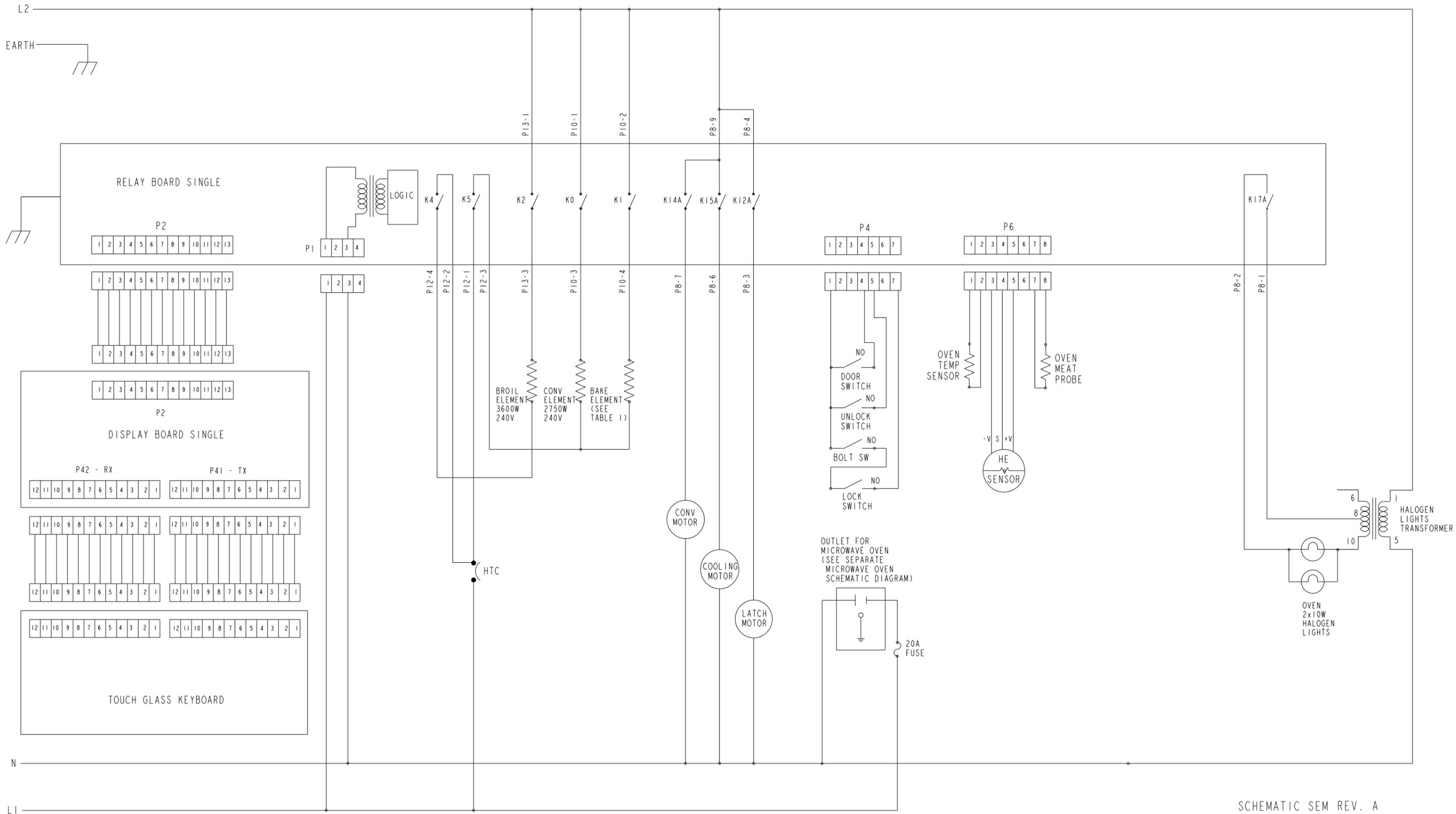
5020010576	



DIAGRAM, WIRE SEMW  
REV. A



5020010576	



1. SWITCH POSITIONS SHOW OVEN IN IDLE.  
 NOTES:

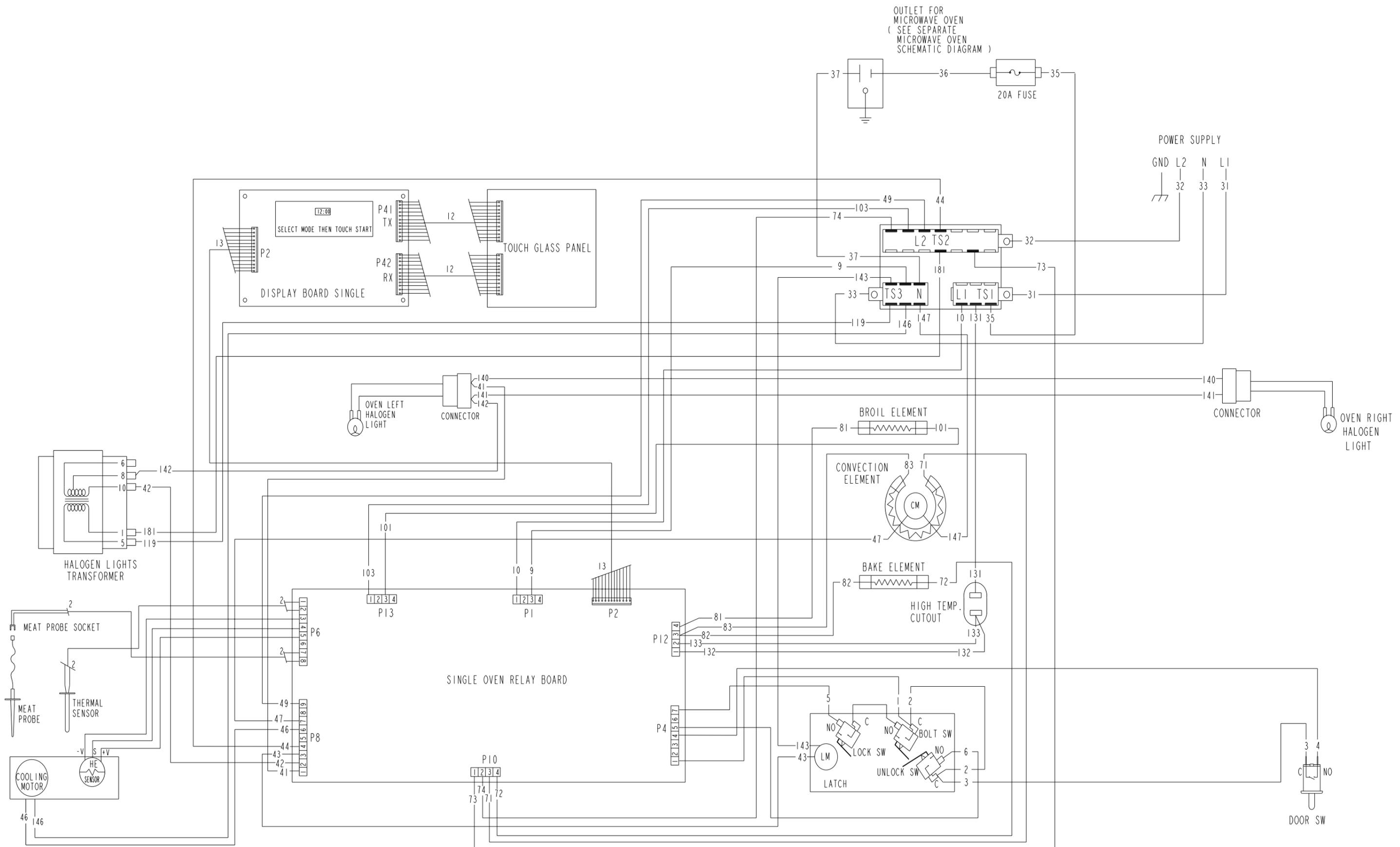
ABBREVIATIONS:  
 NO - NORMALLY OPEN  
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 HE - HALL EFFECT

TABLE 1	
MODEL	BAKE ELEMENT
SEM 27	2200W 240V
SEM 30	2300W 240V



5020010577	

SCHEMATIC SEM REV. A



DIAGRAM, WIRE SEM  
REV. A

GB

5020010577	