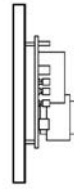
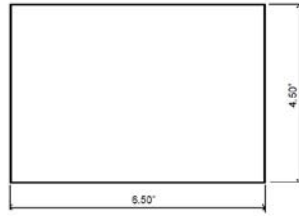
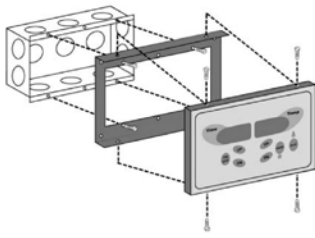


# EL-13 Electronic Control Operation Manual (SD4)



## Sensor location:

Sensor comes pre-attached to control for shipping purposes. Remove and extend in to sauna using grey sensor cable provided. Mount sensor at ceiling, 2' to 3' away from the heater.



**Idle:** When control is inactive, it shows "O" in time window & room temperature in temp window

**Start:** Press "**ON/OFF**".

Sauna defaults to 60 minutes and maximum temperature 90°C (194°F).

When operational, time window will flash between the word "on" and setpoint and time remaining and actual temperature.

When the control is engaged, a small dot will flash in the time window.

**Off:** Pressing the "**ON/OFF**" a third time will turn off the sauna.

**C. vs. F.:** Control can be set to Celsius or Fahrenheit.

When control is off, press temp up + temp down buttons at the same time

**Temperature:** Use the "**up**" and "**down**" icons, on the "Temp" side (right) to set the desired temperature. Defaults to maximum 90°C (194°F)

**Time:** Use the "**up**" and "**down**" icons, on the "Time" side (left) to set the desired time. Sauna defaults to 60 minutes

**Delay Start:** When control is off, press **time "up" + time "down"** buttons at the same time for several seconds. "**Del**" will display in time window (left). Use time up & down arrows to set delay time. Increments of 10 minutes To a maximum of 10 hours. Shows minutes and hours. Press "**on/off**" button to engaged delay start feature

**Aux./Light:** Light function is not available

**User:** Can be used to program a different default setting. One User default is always standard sauna mode (60 minutes and maximum temperature (90°C /194°F). Press "User" to see "other" setting. program preferred time and temperature. Press "on" After that, pressing on will start alternate settings until change back (or there is power loss to control-after power loss, control returns to factory default settings)

## TROUBLESHOOTING:

The sensor wiring and controls are continually checked for proper operation. If a malfunction is detected, the controller will automatically switch OFF the load and deactivate itself. At the same time the display will show

"Err". The controller cannot be reactivated until all causes of the malfunction are fixed.

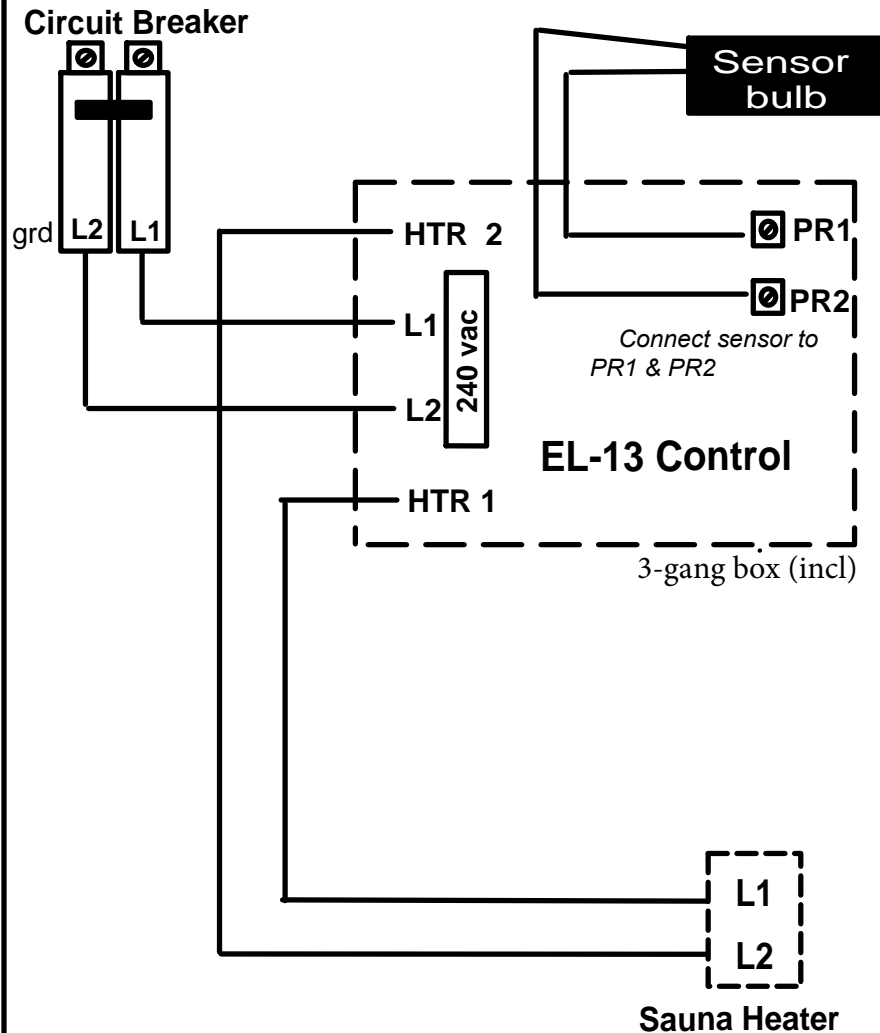
"Err" with "0" in temp window usually indicates sensor is not connected properly.

# EL-13 ELECTRONIC CONTROL

**CONTROL TO BE INSTALL OUTSIDE OF SAUNA (i.e.front wall, next to door)**

**4 KW, 5 KW & 6 KW / 240 Volt / 1 PHASE**

Sensing bulb comes with pigtail. Sensing bulb should be located at ceiling 3'- 4' from heater. 12' of capillary wire included. (If additional length required, use 18ga or 20ga to extend)



## EL-13 CONTROL INSTALLATION AND OPERATION

<u>Watts</u>	<u>Volts</u>	<u>Phase</u>	<u>Copper Wire*</u>	<u>Breaker</u>
4000	240	1	10	30
5000	240	1	10	30
6000	240	1	10	30

\* Wire size is recommendation only.  
Confirm with your licensed electrician.

### Installation Tips

1. Avoid static build up when control sensor bulb are handled.
2. Avoid running sensor bulb capillary wire too close to line power lines.
3. #10 SEW wire with spade connector included. For use if supply wire is #8.

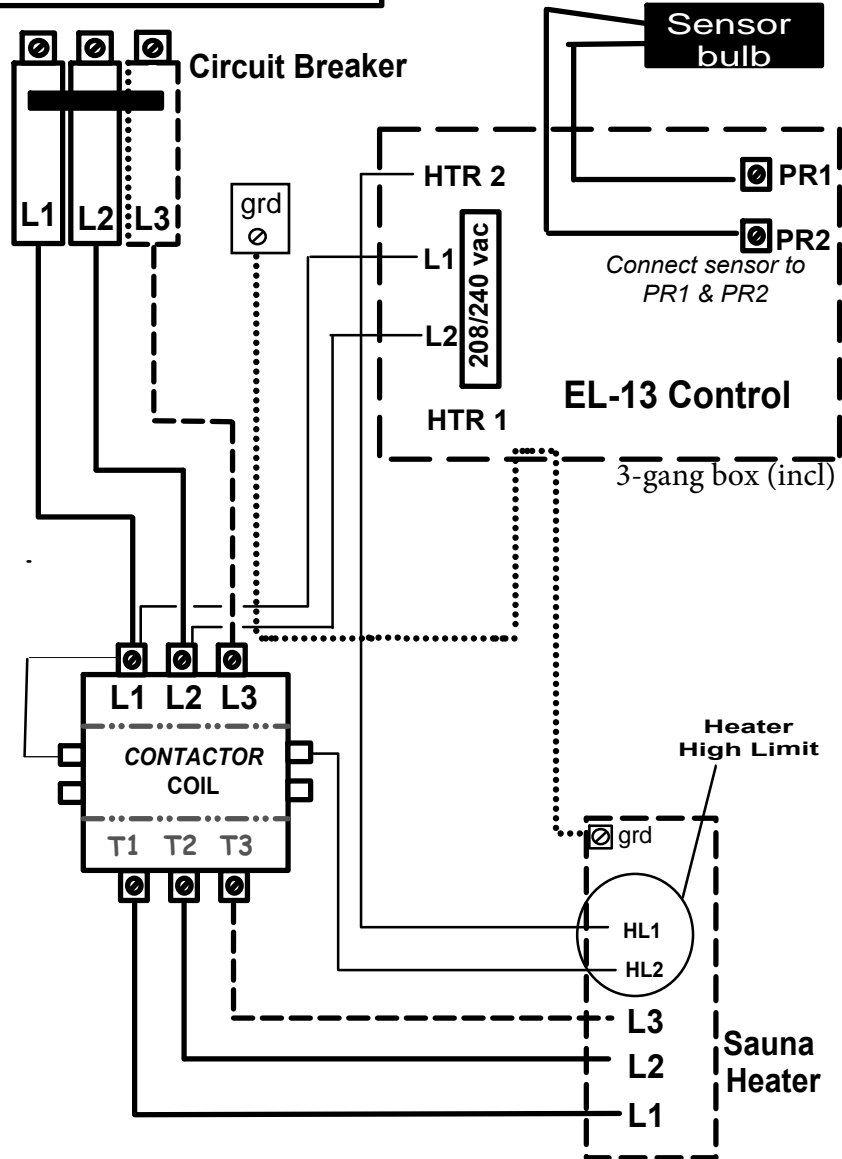
# EL-13 CONTROL with CONTACTOR

For Heaters 7.5 kw & larger

Ensure that correct voltage is applied to the contactor coil.

- Control Wire (#14)
- Supply Wire
- - - Dashed line, 3 Phase Only

Sensing bulb comes with pigtail. Sensing bulb should be located at ceiling 3' -4' from heater. 12' of capillary wire included. (If additional length required, use 18ga or 20ga to extend)

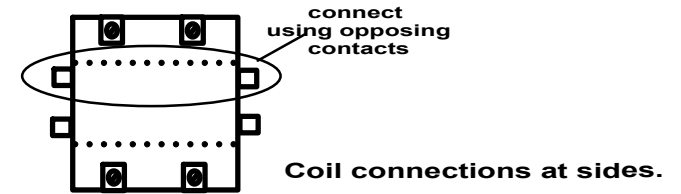


# CONTACTOR DETAIL

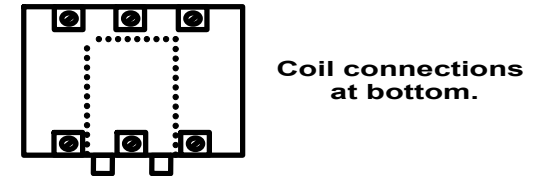
Install contactor between breaker and control. Most are installed next to breaker panel. Following examples of the different contactors depending upon heater wattage and phase. The broken lines represent the coil in the middle of the contactor.

For 7.5 - 9 KW single phase units.

- 40 Amp. Res. (7.5 kw, 240 v, 1phase)
- 50 Amp. Res. (9 kw, 240 v, 1 phase)



3 phase units and 12 kW, 240 volt, single phase



- 40 Amp. Res. (6kw to 12 kw, 208v , 3 ph)
- 50 Amp. Res. (15 kw, 208v, 3 ph)
- 63 Amp. Res. (18 kw, 208v, 3 ph & 12kw), 240v, 1ph

Watts	Volts	Phase	Copper Wire*	Breaker
6000	208	3	10	30
7500	240	1	8	40
7500	208	3	10	30
9000	240	1	8	50
9000	208	3	8	40
12000	240	1	6	60
12000	208	3	8	50
15000	240	1	4	80
15000	208	3	6	60
18000	208	3	6	70

\* Wire size is recommendation only. Confirm with your licensed electrician.