HOMECRAFT
SAUNAS

The Apex

The Pinnacle of Great Heat



10kw (240v)
12kw (240v or 208v)
15kw (240v or 208v)
18kw (208v)

Table of Contents



Table of Contents

Page 1. Front Page
Page 2. Table of Contents
Page 3. Safety & Warnings
Page 4. Heater & Electrical Specs
Page 5. Safety Distances & Heat shield
Page 6. General Info (heater guard, ventilation)
Page 7 . Preparing your sauna install
Page 8. Installing Temp Sensor
Page 9. Contactor Box & Installation help
Page 11. Schematics - Relay Control Box with Controls
Page 12. Warranty

For Video tutorials & helps please visit our website (www.homecraftsaunas.com) or our Youtube channel.

Safety Warnings

General Warnings:
The use of alcohol, drugs, or medications is capable of greatly increasing the risk of fatal hyperthermia
Never leave small children unattended within the sauna room
Never place combustible materials on the sauna heater or within the unsafe distances to combustibles
If you have pre-existing health conditions consult a doctor before use
No receptacles shall be installed inside a sauna room
Prolonged use in a Sauna room could result in Hyperthermia. Symptoms include but are not exclusive to: Failure to perceive heat / Failure to recognize the need to exit the room / Unawareness of impending hazard / Fetal damage in pregnant women / Physical inability to exit the room or unconsciousness.

Operational Safety Guidelines:

The sauna heater must have rocks placed correctly as per manufacturer's instructions. The Heater is never to be run without rocks.
Make sure enclosed elements are covered with stones, and the stones have sufficient spacing for air movement.
This Sauna Heater must be secured, with the provided safety brackets, to the floor for safe use.
Sauna doors must always open outwards, should never have a latch or lock that could cause entrapment Homecraft Doors use a safe roller latch.
Never touch a heater that is turned on and never place objects on top of the sauna heater.
The safety to combustibles for the Apex Sauna heater (10kw,12kw,15kw,18kw) is 5.5"
Always check to ensure the sauna heater is turned off after use. Yearly maintenance, cleaning, and regular inspection of the sauna rocks is important.
Ensure the correct, suitable breaker panel with a correct circuit breaker is installed to match the requirements of the sauna heater. GFI breakers may cause the heater to not function properly and are not recommended unless local code requires

Installing Safety Warnings:



HOMECRAFT HAS PROVIDED A METAL SAFETY LABEL AND SUPPORTING HARDWARE TO BE MOUNTED ON THE INSIDE OF THE SAUNA ROOM, ABOVE THE HEATER AT EYE LEVEL.



REDUCE THE RISK OF OVERHEATING MUST BE PLACED ON THE OUTSIDE OF THE SAUNA ROOM.

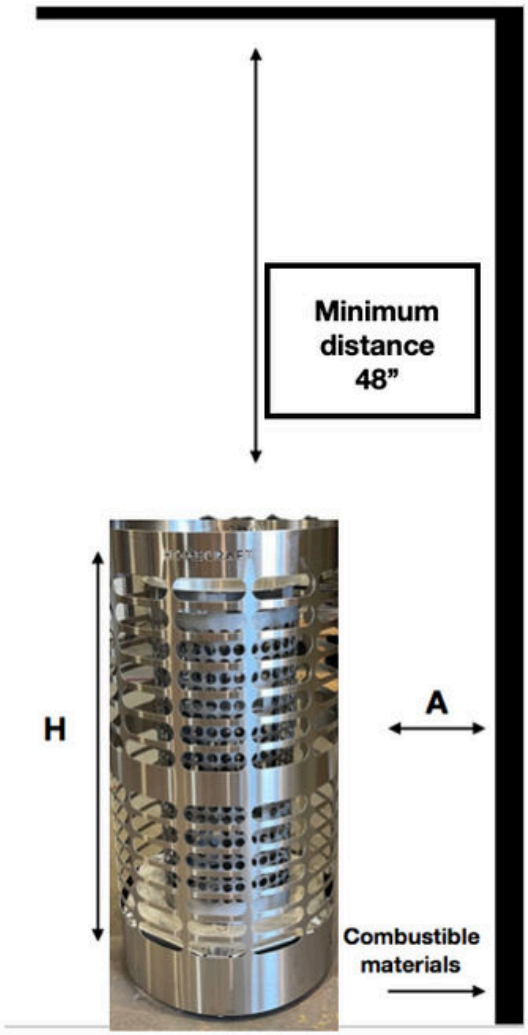
THE APEX

Sauna heater electrical specifications

Apex 240v 1Phase	Output 240v	Optimal Room Size (Cubic ft)	Amps	Circuit Breaker	Wire Size
Apex 10kw	10000w	400-575	41.6	50amp	8
Apex 12kw	12000w	450-750	50	70amp	6
Apex 15kw	15000w	600-950	62.5	80amp	6

Apex 208v 3Phase	Output 208v	Optimal Room Size (Cubic Ft)	Amps	Circuit Breaker	Wire Size
Apex 10kw	10000	400-575	27	40	8
Apex 12kw	12000	450-750	33.4	50	6
Apex 15kw	15000	600-950	41.7	60	6
Apex 18kw	18000	690-1150	48	60	6

Safety to combustibles	A	Minimum distance to ceiling	Height	Heater Size
Apex 10kw	5.5''	48''	36''	18'' x 36''
Apex 12kw	5.5''	48''	36''	18'' x 36''
Apex 15kw	5.5''	48''	36''	18'' x 36''
Apex 18kw	5.5"	48''	36''	18'' x 36''



It is important to recheck your safety to combustible to ensure you have the correct safety spacing



Ceiling Heat Shield:

- A Heat shield is required for ceiling at 7' with the 18kw Apex
- Remove the stainless steel protective film before Installation.
- Ensure the Heat Shield is directly above the heater with a proper 2'' sticking out beyond the 18'' diameter heater
- Take a minimum of 4 screws and secure the heat shield to the ceiling.

A Guide to your Apex

Non-insulated sauna rooms can heavily affect the performance of the sauna heater. Ensure that you have chosen the correct size sauna heater to ensure optimum performance.
It is important to have a yearly routine of cleaning and rearranging the sauna stones to remove old and weathered stones replacing them with new stones.
The Apex sauna heaters are designed for large residential or commercial saunas. For commercial use it is important to periodically inspect the heaters heating elements & rocks to ensure they are in proper working condition.

Heater Guard:
For Safety purposes it is necessary to install a Heater Guard safely around the Sauna heater that adheres to the proper safety distances to combustible materials. The Apex heater needs to have 5.5" distance to combustible materials to ensure safe and proper use.

Towel Drape Guard:
For US customers to properly safeguard the sauna room from potential fires it is necessary to install the Homecraft Drape guard on the top of the sauna heater. This guard is designed to protect the sauna room from the potential of fires. The towel drape guard has 4 securing points that will align with 4 pre-drilled holes on the top of the heater. Align the "legs" of the drape guard with the correct 4 holes on the sauna heater and secure the drape guard in place. Install the towel drape guard after the heater is fully installed and the rocks have been placed inside the heater.



Ventilation:
Proper venting in the sauna is important for several reasons. Firstly, to replenish oxygen inside the sauna and secondly to create airflow that will create a better ambient or consistent temperature for the sauna bather. Ideally, intake and exhaust vents are placed on opposite walls. Replenishing oxygen with proper ventilation is important for the enjoyment of the sauna experience and for an even distribution of heat within the sauna room.

PLACING THE SAUNA HEATER ROCKS

Preparation:

- Use gloves to place rocks inside of the sauna heater
- Remove the protective plastic on Stainless Steel before use
- Wash sauna rocks before placement inside heater

Type of Rocks:

- It is necessary to use igneous rocks in every Homecraft Sauna heater
- Rocks must not have fractures
- Rocks for the Apex should be between 3" - 6" in size

Placement inside Heater

- Sort through your rocks and choose the larger rocks to be placed first
- Sauna rocks should be placed with space between them to ensure air proper airflow
- Rocks should be placed until the sauna heater is completely full or at minimum covering the element protetive cage
- Sauna rocks should withstand heat and heat variation caused by vaporation of water that is thrown on to the stones
- The use of improper stones that cause damage to the heater or elements may void warranty
- Sauna rocks should be reviewed every 12 months to ensure structural integrity and that the rocks are properly absorbing heat.

Preparing for sauna heater installation

Check the following before installing the sauna heater:

Typical Sauna Set up and components from the Manufacturer

- Relay Contactor Box containing a 24v class 2 transformer and relays, and a magnetic contactor that is prewired. 18/4 & 18/2 wires are supplied for connecting the touchpad to the contactor box and 18/2 wires for the Temperature sensor to the touchpad
- A low voltage Digital Sauna touchpad (that will mount to a standard 2-gang electrical box - NOT supplied) by which you set your time and temperature.
- Warning label package
- Temperature Sensor Package
- Mounting Hardware for certain heaters

Installation of the sauna heater:

- Please ensure that the heater is properly sized for the sauna room and that the correct breaker and wire size is being used. (Sauna rooms with glass, masonry stone or poor insulation will adversely affect the sauna heater and it is recommended to check with the manufacturer to ensure you are properly sizing your heater.)
- The minimum ceiling height for the Apex heaters is 7'.
- Ensure the heater is correctly spaced from combustible materials
- Please take off the protective film before turning on the sauna heater

- All electrical installations must be done by a certified electrician and in accordance with local electrical standards or guidelines.
- Ensure the floor is sufficiently solid to handle up to 325 lbs of rocks with the Apex heaters
- Adjust the legs to ensure the sauna heater stands level
- Place the rocks in the sauna heater once it has been properly installed and turned on for it’s first cycle to burn off any residue from the heating elements.

If your heater won’t turn on:

- Check that the electrical connections are installed correctly
- Take a multimeter and work your way to see where the power is failing
- If an error is reading on the touchpad see the troubleshooting page on the Homecraft website under resources

Installing the Temperature Sensor:

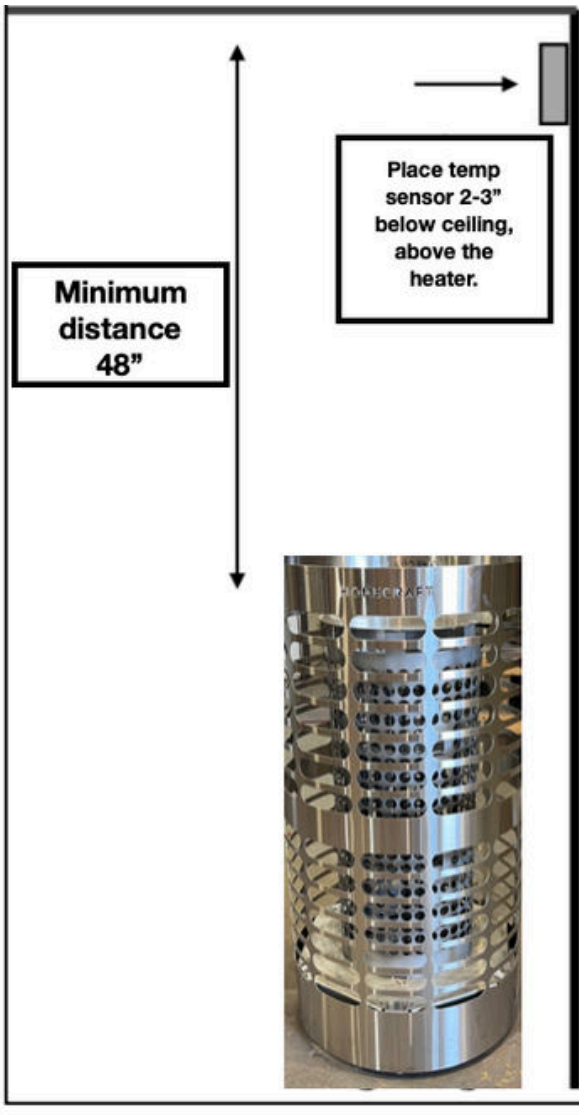
Find the package marked “Temperature sensor pack”. Inside is the small red “thermistor” or temperature sensor, screws, and the metal cover.

Purpose:
The temperature sensor connects (with the 18/2 wire) with the sauna touchpad and will relay the accurate temperature of the sauna room to the touchpad.

Placement:
The temperature sensor should be installed in-line with or directly above the heater and place 3-4'' from the ceiling.

Step 1: Attach the temperature sensor (red thermistor), to the supplied 18/2 wire. If you require a longer distance between the sensor and the sauna touchpad it is recommended to purchase sufficient legnth to have one continuous wire to the sensor.
Step 2: Be sure to run the 18/2 wire inside the insulated stud space in the sauna wall
Step 3: Be sure to leave sufficient slack in the 18/2 wire so that you can have the 18/2 wire sticking out of the wall to be able to easily connect the temperature sensor / Thermistor to the wire.
Step 4: The 18/2 wire should be connected to the sauna touchpad where it reads “probe” and run to the placement where the temperature sensor will be placed above or in-line with the heater 3-4'' from the ceiling.

Warning: Improper placement of the temperature sensor can cause the heater to overheat or not function optimally. Placing the temperature sensor far away from the heater can cause the high limit to trip or compromise personal safety.



Middle Room Installations:
If the heater is installed away from the walls then it is necessary to install the temperature sensor above or to one side of the heater on the ceiling.

Heating the sauna for the first time:

- Remove the protective film on the sauna heater once it has been installed. Do not turn the heater on with the protective film or it wlll adhere to the heater, damaging it.
- Run the heater for a minimum of 45-60 minutes to cure or bake off the oils on the heating elements. There will be an odour that is emitted from the elements and you should air out the sauna room afterwards.
- Ensure the heater is properly in place and the rocks are installed correctly
- Every Homecraft Heater is approved and certified under CSA & UL

NOTE: ALL HOMECRAFT HEATERS SHOULD BE INSTALLED BY A CERTIFIED OR QUALIFIED ELECTRICIAN & IN ACCORDANCE TO LOCAL REGULATIONS

Relay Control Box:

Every Homecraft heater needs a relay contactor box to effectively install and run your sauna heater. The Relay control box contains the 24-volt class 2 transformer and a magnetic contactor.

Components / Parts:

- 24-volt class 2 transformer
- Appropriately sized magnetic contactor
- Low voltage 18/4 (to wire the touchpad on 1 hour control set ups) & 18/2 wires for the temperature sensor.

Placement:

- The contactor box should be installed in a location that is accessible for servicing.
- Either outside the sauna room in a weatherproof electrical box, in a mechanical room or inside the studded walls with an accessible panel
- Never place in an area where the contactor box received direct heat from the sauna heater

Connecting the sauna to the mains:

- Ensure the proper gauge copper wire is used for installation (Please see Page 4)
- All wiring should be directed away from direct heat radiating from the sauna heater.
- The High limit manual reset switch must be wired into the circuit
- Unless local code requires do not use a GFI breaker to operate sauna heater



Homecraft Digital Control / Touchpad:

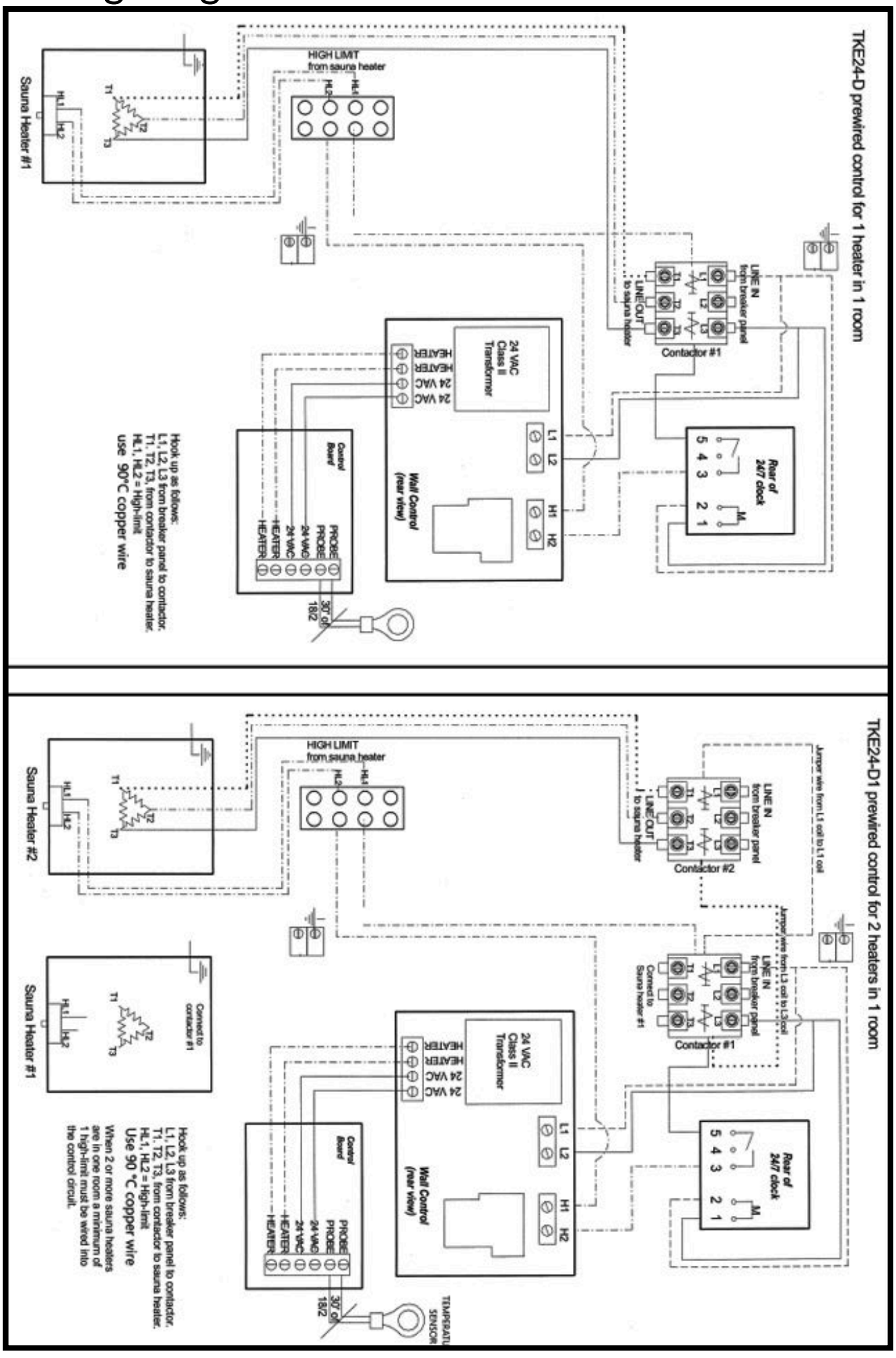
- The control will mount perfectly into a 2 gang electrical box
- Every Homecraft touchpad is a class 2 - low voltage control
- The 1 hour touchpads are precise and are made in accordance to CSA & UL regulation
- Each 1 hour control is preset to operate at 90c or 194f and can be adjusted by holding down the temperature buttons for 3 seconds
- Mount outside the sauna room in an area not fully exposed to weather (for outdoor saunas)

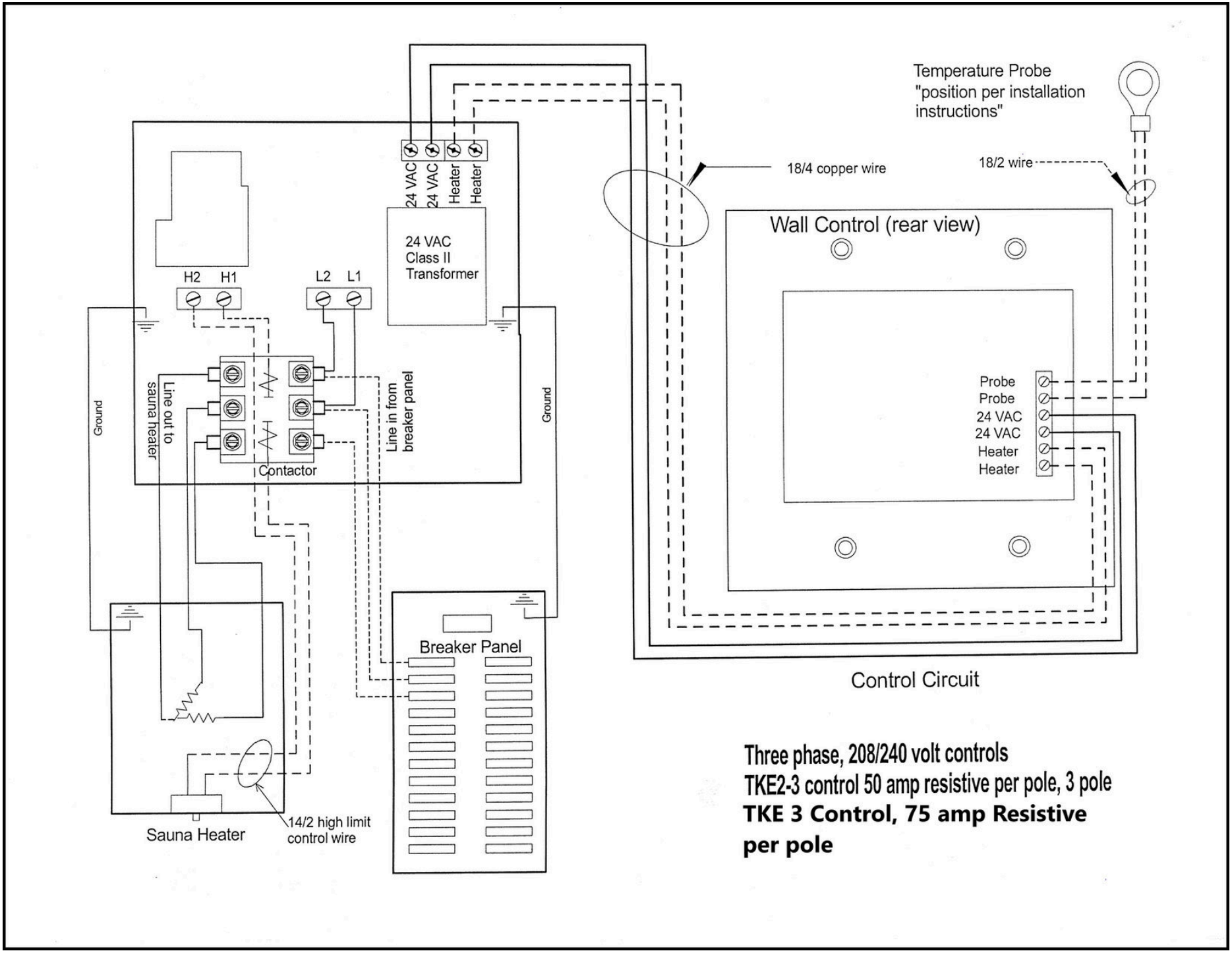
Manual High limit Switch

- Every Homecraft sauna heater is equipped with a thermal safety switch to prevent safe operational temperatures.
- The safety switch will shut off when / if the sauna heater overheats
- The safety switch can be found near the front lower portion of every heater and can be accessed via the small hole
- Place a small non-metallic object into the hole and you can reset the protruding tab when the high limit safety switch has tripped

Note: If the "reset safety switch" trips frequently, please contact a qualified serviceperson or reach out to Homecraft directly for assistance.
French Translation: Si le limiteur de température à réenclenchement manuel se déclenche souvent, appelez un réparateur qualifié.

Wiring Diagrams




Temperature Probe
"position per installation instructions"
18/4 copper wire
18/2 wire
Wall Control (rear view)
Probe
Probe
24 VAC
24 VAC
Heater
Heater
24 VAC
24 VAC
Heater
Heater
24 VAC
Class II
Transformer
H2
H1
L2
L1
Ground
Line out to sauna heater
Contactor
Line in from breaker panel
Ground
Breaker Panel
Sauna Heater
14/2 high limit control wire
Control Circuit
Three phase, 208/240 volt controls
TKE2-3 control 50 amp resistive per pole, 3 pole
TKE 3 Control, 75 amp Resistive per pole

WARRANTY TERMS:

THE BUYER IS OBLIGATED TO READ THE USER MANUAL AND FOLLOW THE INSTRUCTIONS AND REQUIREMENTS PRESENTED. DAMAGE TO THE PRODUCT CAUSED BY NOT FOLLOWING THE INSTRUCTIONS OR FROM IMPROPER SAUNA USE, OR TAMPERING OF THE HEATER WILL VOID THE WARRANTY. IF THERE ARE ANY DEFECTS ON THE SAUNA HEATER, WHERE THE MANUFACTURER CAN BE BLAMED, THE BUYER HAS THE RIGHT TO DEMAND A REPLACEMENT OR REPAIR OF THE PRODUCT. ALL COMPLAINTS MUST HAPPEN WITHIN THE TIME PERIOD OF THE LIFE OF THE WARRANTY.

WARRANTY TERMS:

2 YEAR WARRANTY APPLIES ONLY TO ELECTRIC HEATERS THAT HAVE BEEN USED ACCORDING TO THE INSTRUCTION MANUAL
WARRANTY DOES NOT COVER HEATING ELEMENTS AS THEY ARE CONSIDERED A CONSUMABLE PART
WARRANTY DOES NOT COVER GENERAL WEAR THAT OCCURS FROM NORMAL SAUNA USE

WARRANT DOES NOT APPLY WHEN:
PRODUCT HAS BEEN DAMAGED BY CARELESSNESS
PRODUCT HAS NOT BEEN INSTALLED CORRECTLY
PRODUCT HAS BEEN MODIFIED OR TAMPERED WITH

COMMERCIAL WARRANTY:

FOR ALL COMMERCIAL INSTALLATIONS, HOMECRAFT HAS A 1-YEAR WARRANTY FROM DATE OF PURCHASE. THE WARRANTY INCLUDES ALL MANUFACTURED PARTS AND COVERS DEFECTS IN MATERIALS OR WORKMANSHIP. CONSUMABLE COMPONENTS SUCH AS HEATING ELEMENTS ARE EXCLUDED FROM THIS WARRANTY.
THIS WARRANTY IS VOID IF THE HEATER IS TAMPERED WITH, NOT INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, OR MODIFIED WITH NON-APPROVED COMPONENTS.
FOR WARRANTY CLAIMS, PROOF OF PURCHASE AND PROPER INSTALLATION DOCUMENTATION MAY BE REQUIRED.

Thank You from Homecraft

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