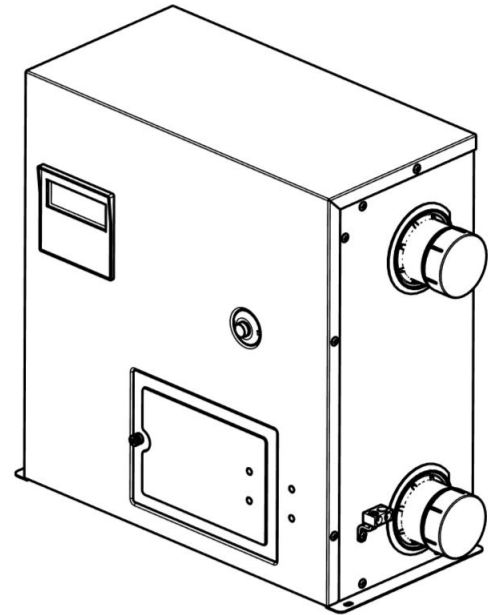


INSTALLATION AND OPERATION MANUAL

Electric Pool and Spa Heater (3-Phase)

3-PHASE MODELS:

**ELS 0018, ELS 0024, ELS 0030,
ELS 0045 and ELS 0054**



NOTICE

SCAN WITH QR EQUIPPED SMART
DEVICE FOR ONLINE MANUAL.



Certified to UL Standard 1261

Certified to CEC Title 20

FOR YOUR SAFETY: Do not store or use gasoline or other flammable vapors and liquids or other combustible materials in the vicinity of this or any other appliance. To do so may result in an explosion or fire.

NOTE: The instructions in this manual are for the use of qualified individuals specially trained and experienced in the installation and maintenance of this type of equipment and related system components. Installation and service personnel are required by some states to be licensed. Persons not qualified shall not attempt to install, service, or maintain this equipment.

This manual should be maintained in legible condition and kept adjacent to the electric heater or in a safe place for future use.



Effective: 02-10-25
Replaces: 09-06-24
P/N: 242011 Rev. 07

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THIS INSTALLATION MANUAL MAY NOT BE THE LATEST REVISION PRINTED AT THE TIME OF PRODUCT SHIPMENT. VISIT THE RAYPAK WEBSITE TO VERIFY THE MANUAL DELIVERED WITH YOUR RAYPAK UNIT IS THE MOST UP-TO-DATE VERSION OR SCAN THE QR CODE ON THE COVERPAGE.

Revision 07 reflects the following changes:

Added Section "7.0 Pressure Drop" in its entirety.

1. WARNINGS

Pay Attention to these Terms

▲ DANGER	Indicates the presence of immediate hazards which will cause severe personal injury, death or substantial property damage if ignored.
▲ WARNING	Indicates the presence of hazards or unsafe practices which could cause severe personal injury, death or substantial property damage if ignored.
▲ CAUTION	Indicates the presence of hazards or unsafe practices which could cause minor personal injury or product or property damage if ignored.
CAUTION	CAUTION used without the warning alert symbol indicates a potentially hazardous condition which could cause minor personal injury or product or property damage if ignored.
NOTE	Indicates special instructions on installation, operation, or maintenance which are important but not related to personal injury hazards.

▲ WARNING: Do not use this heater if any part has been under water. Immediately call a qualified service technician to inspect and replace the heater.

▲ WARNING: To minimize the possibility of improper operation, serious personal injury, fire, or damage to the heater:

- Always keep the area around the heater free of combustible materials, gasoline, and other flammable liquids and vapors.
- Heater should never be covered or have any blockage to the flow of fresh air to the heater.

2. WATER CHEMISTRY

⚠ CAUTION: Corrosive water voids all warranties

For your health and the protection of your spa/pool equipment, it is essential that your water be chemically balanced. The levels shown in **Table A** must be used as a guide for balanced water.

Spa/Pool Water Chemistry

Occasional chemical shock dosing of the pool or spa should not damage the heat exchanger providing the water is balanced. Automatic chemical dosing devices and salt chlorinators are usually more efficient in heated water. If not controlled, they can lead to high chemical levels which can damage the heat exchanger. Further advice should be obtained from your pool or spa builder, accredited pool shop, or chemical supplier for the correct levels for your water.

Water Chemistry	Allowable Levels
Water Temperature	68-104°F (20-40°C)
pH	7.6-7.8
Total Alkalinity (ppm)	80-120
Calcium Hardness (ppm)	200-400
Salt (ppm)	4500 Maximum
Free Chlorine (ppm)*	2-3
Total Dissolved Solids (ppm)	3000 Maximum**

*Free Chlorine MUST NOT EXCEED 5 ppm!

**In saltwater chlorinated pools, the total TDS can be as high as 6000 ppm.

Table A. Spa and Pool Water Chemistry

Automatic Chlorinators and Chemical Feeders

All chemicals must be introduced downstream of the heater and completely diluted into the water before being circulated through the heater. Chlorinators must feed downstream of the heat exchanger and have an anti-siphoning device or check valve to prevent chemical back-up into the heat exchanger when the spa/pool filtration pump is shut off.

⚠ CAUTION: High chemical concentrations from feeders that are out of adjustment will cause rapid corrosion of the heat exchanger. Such damage is not covered under the warranty.

⚠ CAUTION: Failure of a heat exchanger due to lime scale build-up on the heating surface, low pH, or other chemical imbalance is not covered under the warranty.

3. SAFETY INFORMATION

Pool water temperatures typically range from 78°F (26°C) to 82°F (28°C). The American Red Cross recommends a

temperature of 78°F (26°C) for competitive swimming. However, this may be too cool for young children and the elderly, who may require a temperature of 80°F (27°C) or higher.

IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS GIVEN IN THIS MANUAL.

The water in a spa or pool should never exceed 104°F (40°C). A water temperature in excess of 104°F (40°C) is considered unsafe for all persons. Lower water temperatures are recommended for extended use (exceeding 10-15 minutes) and for young children.

Excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy. Pregnant or possibly pregnant women should limit spa or pool water temperatures to 100°F (38°C).

Before entering a spa or pool, the user should measure the water temperature at several locations using an accurate thermometer since the tolerance of water temperature - regulating devices may vary as much as +/- 5°F (3°C).

Alcohol, drugs or medication should not be used before or during spa or pool use since their use may lead to unconsciousness with the possibility of drowning.

Persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa or pool.

Persons using medication should consult a physician before using a spa or pool since some medication may induce drowsiness while other medication may affect heart rate, blood pressure and circulation.

Prolonged immersion in hot water may induce hypothermia. Hypothermia occurs when the internal temperature of the body reaches a level several degrees above normal body temperature of 98.6°F (37°C).

The symptoms include dizziness, fainting, drowsiness, lethargy and an increase in the internal temperature of the body. The effects of hypothermia include: Unawareness of impending hazard, failure to perceive heat, failure to recognize the need to exit spa or pool, physical inability to exit spa or pool, fetal damage in pregnant women and unconsciousness resulting in a danger of drowning.

SAVE THESE INSTRUCTIONS

4. OVERVIEW

Congratulations on the purchase of the most advanced spa/pool electrical heater in the market. To get the best performance and savings from your new heater, it is important to install the heater in accordance with our instructions and the electrical and plumbing codes applicable to your area. If you have any questions, please contact your Authorized Dealer, or visit our website at www.raypak.com.

5. BEFORE INSTALLATION

Please read these instructions thoroughly and completely before installation and before use. Failure to do so could cause property damage or serious personal injury or death and void your warranty.

By installing this product, you acknowledge the terms of the manufacturer's warranty and your Authorized Dealer's return policies. The heaters that have been installed cannot be returned. If you have any questions regarding the warranty or product return policies, please consult your Authorized Dealer prior to installation. Open the box and carefully unpack the heater. Inspect all components.

6. INSTALLATION

The heaters are designed for indoor or outdoor use. The heater should be mounted on a level, non-combustible surface per **Figure 2**. Heater must not be installed on carpeting. DO NOT use the shipping crate base as an installation base.

- The heater must be mounted in a vertical position over a ground level base or a wall.
- Secure the heater to the base with screws (these are not provided). See **Figure 1** for proper installation of the heater to the mounting base.

IMPORTANT: This product must be installed by a licensed and qualified technician in accordance with all applicable national, state, provincial, and local Energy/Environmental codes.

CAUTION: Combustible materials should be kept at least 24" (610 mm) away from the heater.

Recommended Clearances:

- TOP: 18" (45.7 cm)
- SIDES: 6" (15.2 cm) away from your heater and the outlet hot water pipe.

CAUTION: The heater's supporting base must be high enough to keep completely free of standing water at all times.



Figure 1. Mounting Base Properly Installed

7. PRESSURE DROP

For system pressure drop information, refer to **Table B** below.

The heater is designed to run at a minimum flow rate of 15 gpm (15 lpm) and a maximum of 60 gpm (227 lpm). A manual bypass valve is needed when the flow rate exceeds 60 gpm (227 lpm). The heater will not energize elements if the water flow is under 15 gpm (57 lpm).

GPM (lpm)	Pressure Drop in PSI	Pressure Drop in ft. of Head
15 (57)	1.8	4.2
20 (76)	2.1	4.9
25 (95)	3.0	6.8
30 (114)	4.0	9.1
35 (132)	4.8	11.1
40 (151)	6.5	14.9
45 (170)	7.5	17.4
50 (189)	9.2	21.2
60 (227)	12.7	29.4

Table B. Pressure Drop for Models ELS 0018 through ELS 0054

8. WATER CONNECTION

IMPORTANT: When preparing the connections going to the heater, make sure you do not use glue or putty. Any glue or putty going into the heater will damage the flow sensor permanently. Prior to the final connections to the heater, flush all the lines to clear any debris.

NOTE: When using two-speed pumps, do not install a gate valve on the inlet side. No shutoff valves are to be installed in the piping between the spa heater outlet and the spa. If using an in-line chlorinator, a check valve must be used. Any chlorinator valves that can cause return line blockage will VOID the warranty.

Please follow all plumbing instructions carefully. This product must be installed by a licensed and qualified plumber in accordance with all applicable national, state, provincial, and local plumbing codes.

- The heater must be installed after installation of the filter.
- All units are supplied with standard 2" NPT inlet and outlet plumbing connections.
- ELS 0018, 0024, 0030 are rated for operation on either 208 or 480V, 50/60Hz power; while ELS 0045 and ELS 0054 are rated for use only on 480V, 50/60Hz.
- Heaters are flow activated 15 gpm (57 lpm) minimum.
- No Hartford loop is required.

After tightening both fittings at the water heater, start the pump to allow water to run through the spa/pool heater for at least 5-10 minutes. This process purges all the air from the water lines and must be performed prior to turning on the power at the heater.

⚠ CAUTION: Failure to follow this step can cause permanent damage to the heating elements.

When any maintenance is performed on the spa/pool that may introduce air into the plumbing pipes, it is important to turn the power off to the heater and purge the air out of the lines before allowing the heater to power up.

Dry-Firing of Elements

Dry-firing of elements is caused by water voids when power is on. All air must be purged from the system before any heat start-up. It is important to purge all air after cleaning or changing a cartridge filter. The filter casing acts as an air reservoir during this procedure, the circulation system must be on for at least two (2) minutes before you turn power on to this heater.

The heater must have an adequate flow of water for proper operation. Adequate water flow removes the heat produced by the heater and transfers the heat to the spa/pool and prevents overheating. Low water flow usually results from dirty filter or improperly adjusted manual bypass. The heater is designed to run at a minimum flow rate of 15 gpm (57 lpm) and maximum of 60 gpm (227 lpm). Manual bypass valve is needed when the flow rate exceeds 60 gpm (227 lpm). The heater will not energize elements if the water flow is under 15 gpm (57 lpm). Once 15 gpm (57 lpm) has been established, the heating elements will energize for 1-minute after flow is configured. This is to make sure the tank is completely filled with water and any air in the tank has had time to escape.

RAIN WATER RUNOFF. The heater is designed to operate outdoors and can be exposed to rain. However, rain water runoff falling directly onto the heater from a roof can cause damage and/or shorten the life of your heater. Such damage will not be covered under warranty. Install rain gutters or rain diverters on your roof if the heater is installed in a position where contact with rain runoff may occur.

9. ELECTRICAL CONNECTIONS

⚠ WARNING: Please read these instructions thoroughly and completely before installation and before use. Failure to do so could cause property damage or serious personal injury, or death and void your warranty.

⚠ WARNING: Risk of electrical shock. More than one disconnect switch may be required to de-energize the equipment before servicing.

This product must be installed by a licensed and qualified electrician in accordance with Article 680 of the National Electrical Code, NFPA 70 and with the requirements of the authority having jurisdiction and all applicable national, state, provincial, and local electrical codes.

NOTE: The heater grounding conductor shall be the same size or larger than the live power supply conductors.

As with all electrical appliances, under no circumstances should you attempt to install, repair or disassemble this heater without first shutting off all power to the heater directly at the fuse or breaker box.

⚠ WARNING: Serious bodily injury or death could occur if you ignore shutting off all power to the heater at the fuse or breaker box.

All wiring (wire gauge) and circuit protection (breakers) must comply with the U.S. National Electrical Code (NEC) in the U.S.A., or the Canadian Electrical Code (CEC) in Canada. Failure to do so could result in property damage and/or personal injury, and void your warranty.

NOTE: The Canadian Electrical Code generally requires that all supply wires and corresponding circuit protection (breakers) used for hot water heating applications be sized to a minimum of 125% of the maximum current rating of the heater (see model specifications below for details).

Before installing this product, ensure that the home has sufficient electrical power available to handle the maximum amperage load of the applicable model. **All heaters have one (1) minute time delay on start.** The heater will not energize the elements until 15 gpm (57 lpm) is established. A separate ground conductor for each incoming circuit is required.

⚠ CAUTION: Make sure that the electrical connections are correct and all wire connections are tight and secure. Make sure that the correct breaker size and wire gauge has been used. Make sure that the heater has been connected to a ground in accordance with applicable codes.

For installations in Florida that must comply with the local codes, follow the directions shown in **Figure 3** and **Figure 4** for the installation of hurricane tie-down brackets for both 3-element and 6-element models.

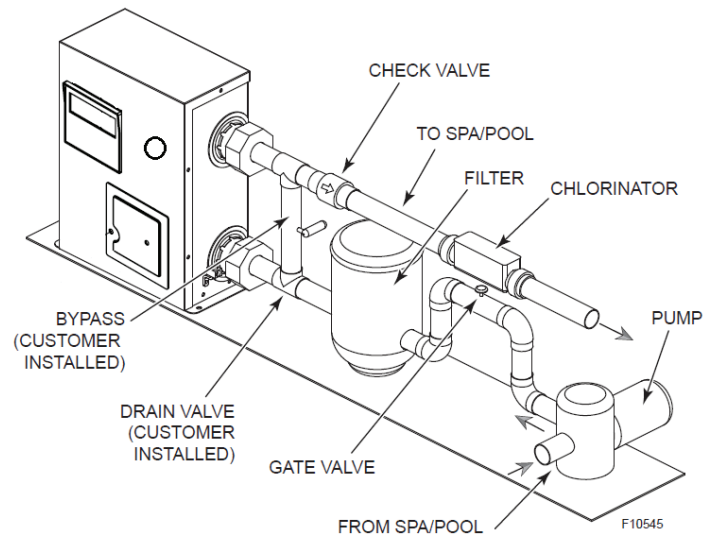


Figure 2. Spa/Pool Installation Diagram

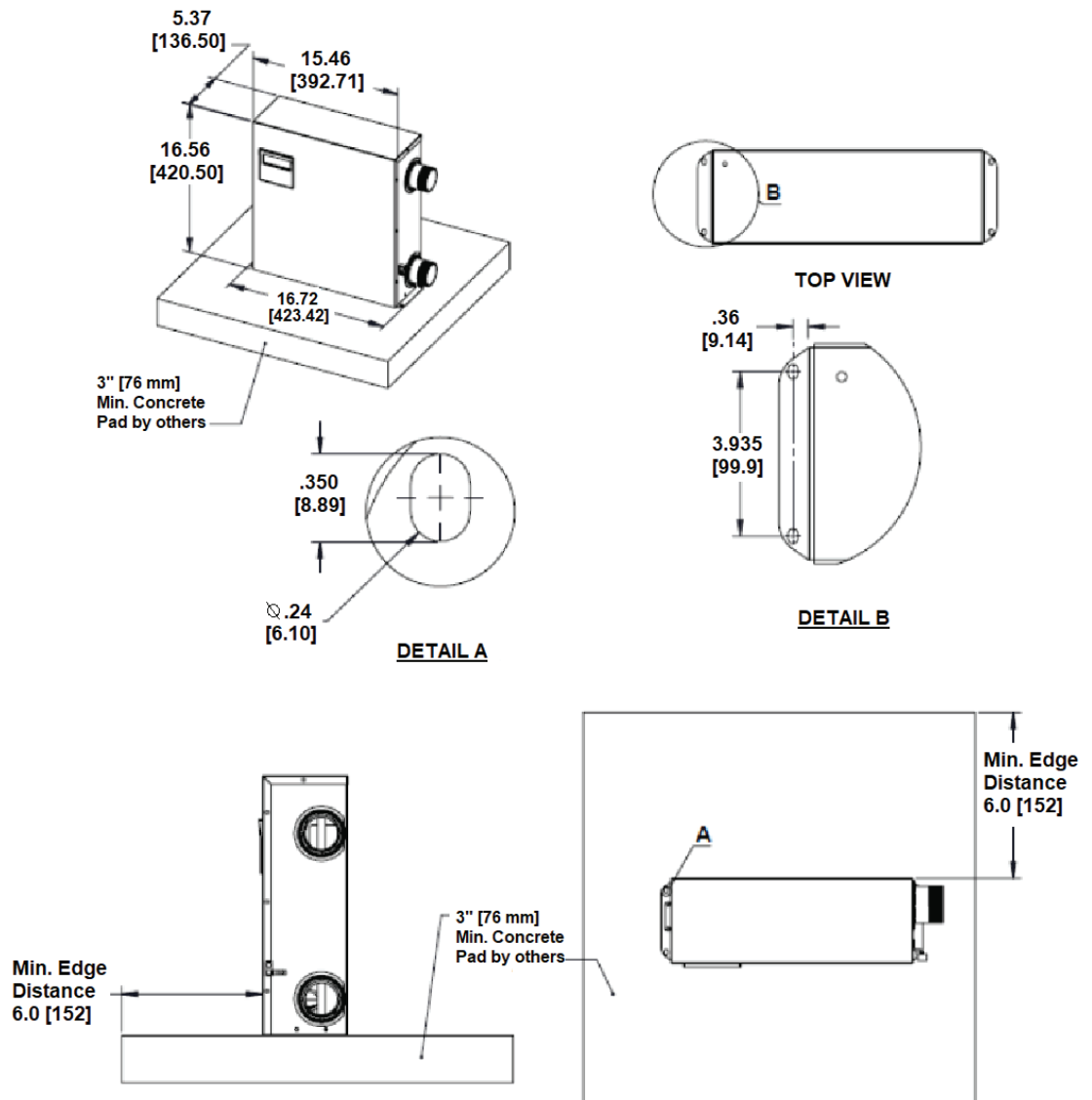


Figure 3. Hurricane Tie Down Details (3-Element Unit)

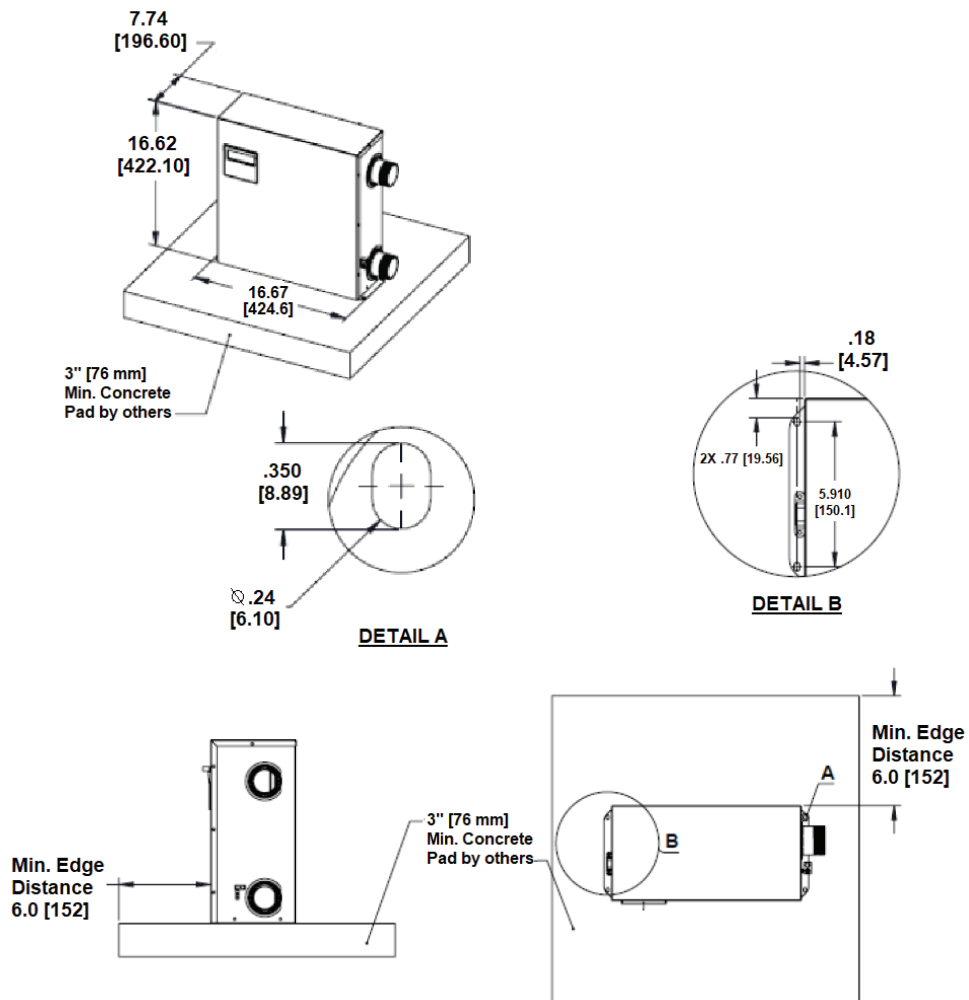


Figure 4. Hurricane Tie Down Details (6-Element)

⚠ WARNING: Refer to your local state code requirements for breaker sizing. The following illustrations refer to UL1995 compliance only.

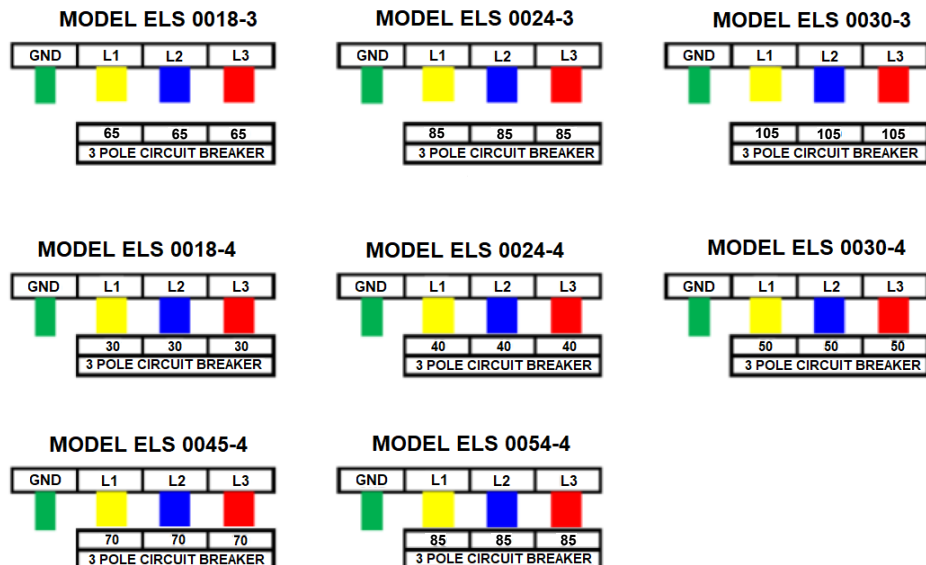


Figure 5. Wire Connection to Circuit Breakers (3-Phase)

⚠ WARNING: Unit does not have a built-in ground fault protection (GFCI). A GFCI circuit breaker may be required, please follow local codes for proper installation.

Model	18kW		24kW		30kW		45 kW	54kW
Voltage (max)	208	480	208	480	208	480	480	480
Power (kW)	18	18	24	24	30	30	45	54
Total Channels	3	3	3	3	6	6	6	6
Total Elements	3	3	3	3	6	6	6	6
Amps per Phase	49.96	21.65	66.62	28.87	83.27	36.08	54.12	64.95
Amps per Heating Element	28.84	12.50	38.46	16.67	24.04	10.42	15.63	18.75
Power Rating per Element	6kW	6kW	8kW	8kW	5kW	5kW	7.5kW	9kW
Frequency (HZ)	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Circuit Breaker (Amps/Phase) per UL1995 standard	65	30	85	40	105	50	70	85

Table C. Electrical Specification (3-Phase)

Model	Input					
	Volts	HZ	kW	Amps	Phase	AWG
ELS-R-0018-3-TI	208	50/60	18	49.96	3	6
ELS-R-0018-4-TI	480	50/60	18	21.65	3	10
ELS-R-0024-3-TI	208	50/60	24	66.62	3	4
ELS-R-0024-4-TI	480	50/60	24	28.87	3	8
ELS-R-0030-3-TI	208	50/60	30	83.27	3	2
ELS-R-0030-4-TI	480	50/60	30	36.08	3	8
ELS-R-0045-4-TI	480	50/60	45	54.12	3	4
ELS-R-0054-4-TI	480	50/60	54	64.95	3	6

Table D. Wire Gauge Information

10. OPERATION

Once the heater is installed, it can be used year-round. The user **MUST** make sure the pump is not disengaged to allow it to run until the desired temperature setting is reached.

The heater will function only when there is sufficient flow through it 15 gpm (57 lpm) minimum. Flow rate is displayed on the screen at all times. Once the heater establishes a consistent flow of over 15 gpm (57 lpm) for one minute, the unit will start energizing.

The one minute time delay is built-in to protect the heater from air in the lines and to avoid burning out the elements as a result of it.

11. CONTROL

All units come equipped with a touch-pad as shown in **Figure 7**. The touch-pad has four main buttons to navigate. Power on/off, a minus and plus button to set desired temperature and a return button.

NOTE: If the controls and display are active, they still draw some power.

Digital Control Temperature Setting

The heater comes with a digital temperature control located in the front panel that can be set from 40°-104°F (4°C-40°C) in one (1) degree increments by pressing the + (plus) and - (minus) buttons.

The unit can be turned off/on using the power button. You can easily switch between °F and °C display by pressing and holding the - (minus) button for 3 seconds.

The display also has a service screen to show the load on each channel. To reach that screen, press and hold "-" and "exit" button for 5-seconds.

All units come equipped with advanced diagnostic capabilities to accurately help troubleshoot the heater when needed. The UI can be used to track past error codes as well as show key information like load %, temperatures, flow rates etc. at all times. Please see **Table F** for various fault codes and corresponding action needed.

Apart from the troubleshooting screen and the standard heating screen, the unit also has a couple of unique features as described in the following sections.

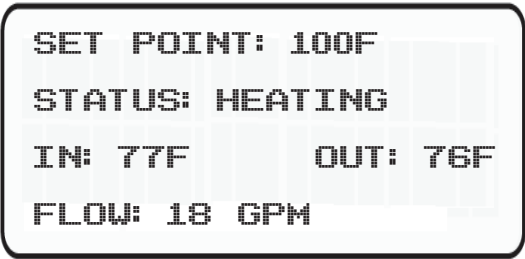


Figure 6. General Display Settings

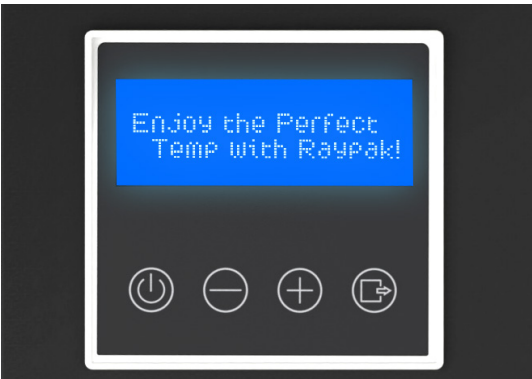


Figure 7. Adjustment Buttons

Properties	208V MODELS		
	ELS 0018	ELS 0024	ELS 0030
Amp Draw per Element (A)	28.84	38.46	24.04
Element Resistance (Ω)	6.87 to 8.01	5.15 to 6.01	8.24 to 9.61

Properties	480V MODELS				
	ELS 0018	ELS 0024	ELS 0030	ELS 0045	ELS 0054
Amp Draw per Element (A)	12.5	16.67	10.42	15.63	18.75
Element Resistance (Ω)	36.57 to 42.67	27.43 to 51.2	43.89 to 51.2	29.26 to 34.13	24.38 to 28.44

Table E. Amp Draw

Code	Description	Action
E1	Inlet thermistor fault	Check inlet temperature sensor. Restart the unit after fixing the sensor.
E2	Outlet thermistor fault	Check outlet temperature sensor. Restart the unit after fixing the sensor.
E3	Temp Reset	Contact service.
E4-1,2,3	Check SSR	Contact service, potential SSR failure.
E5	PCB Fault	Contact service.
E6	Low Flow	Unit registering less than 15 gpm (57 lpm). Please check the flow rate. Contact service if flow is above 15 gpm (57 lpm) and the error is displayed.
E8-1,2,3	Element Failure	Contact service as the elements may need replacement.
E9	No Heat	Freezing conditions detected. Unit will not operate at or below 32°F (0°C).

Table F. Fault Codes for 3-Phase Units

12. REMOTE OPERATION

The heaters are equipped to work with external remote controls. The unit can be connected to either a toggle switch or the switch contacts of a third party remote. The remote works by either making or breaking the circuit created by the remote wiring.

Typically, a remote does not supply power to the heater, it only provides a switching function to turn on/off the heater. If your remote is supplying its own voltage to the heater, it will not work with this heater and may damage the digital circuit board.

NOTE: When under remote operation, the unit is managed by the master control. The unit touch pad is disabled for key functions and the following message is shown:

CHECK MASTER CONTROL
STATUS: REMOTE IN USE
IN: 82F OUT: 82F
FLOW: 15 GPM

Remote Control Wiring

Important installation notes for remote or external wiring configuration:

- Remote wiring must be run in a separate conduit.
- Remote wiring must not be run parallel to high voltage lines.
- For runs of under 30 ft. (9.1 m), remote wiring should have stranded conductors with a minimum of 22 AWG, 600V, cable twisting 1.5" to 2.5" (3.8 cm to 6.4 cm) lay and jacketed.
- For runs over 30 ft. (9.1 m), the conductors should be a minimum of 20 AWG, 600V, cable twisting 1.5" to 2.5" (3.8 cm to 6.4 cm) lay that is shielded and jacketed.
- Maximum cable length is 200 ft. (61 m).

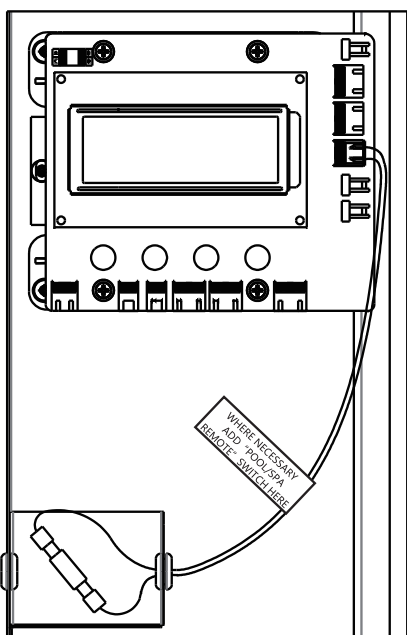


Figure 8. Supplied Wires for the Remote Interface Harness

Remote Control (On-Off)

1. Turn on power to the heater.
2. For a remote control **without its own sensor**, set the desired setpoint, for example 102°F (39°C).
3. For a remote control **with its own sensor**, set the temperature to the highest setting available on the control on the heater. The actual setpoint will be controlled by the remote control.
4. Turn off and remove power from the heater.

5. On the "Remote Interface Harness", the supplied two wires provide power out to either a toggle switch or the switch contacts of a third party remote. See **Figure 8**.

13. FREEZE PROTECTION

If the heater is installed in a location subject to freezing conditions, it is important to protect the water circuit from freezing, just as should be done for the pump and filter.

System Drain Down

1. Make sure the heater is disconnected or turned off.
2. With the spa/pool pump OFF, loosen the PVC unions supplied with the heater on both inlet and outlet pipes.
3. This should allow all of the water inside the heater to drain out and prevent freeze damage to the heater.

All units come equipped with a special freeze protection control. In case of a scenario where the water inlet temperature drops below 36°F (2.2°C) and the unit is in OFF MODE, the unit will operate in pre-heat mode (see **Figure 9**) at a lower capacity until the inlet temperature goes back up to 36°F (2.2°C). The unit will return to an OFF status at that point. This prevents icing of the water inside the unit.

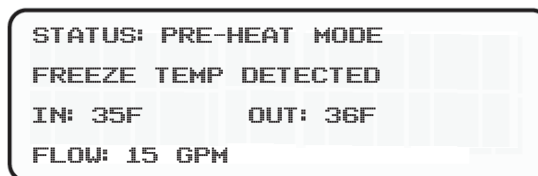


Figure 9. Freeze Protection Pre-Heat Mode Status

If the unit is ON and the inlet temperature is less than 36°F (2.2°C) the unit functionality will depend on the flow rate. In this scenario, if the flow rate is shown to be less than 15 gpm (57 lpm) the unit will operate at reduced capacity, until the temperature returns to 36°F (2.2°C) or the GPM gets to more than 15 gpm (57 lpm). The display in this case will change between pre-heat mode and an E6 "low-flow error" every 3-seconds.

Even at a low inlet temperature (<36°F (2.2°C)), as long as 15 gpm (57 lpm) flow rate is registered by the unit, the heater will continue to operate at 100% input.

However, when inlet temperature drops below 32°F (0°C), the heater will not turn on and Error code E9 shall be displayed.

10K Inlet/Outlet Sensor, All Models	
Temp °F/°C	Resistance (k Ohms)
32 (0)	32.9564
41 (5)	25.5793
50 (10)	20.0089
59 (15)	15.7684
68 (20)	12.5148
77 (25)	10.0000
86 (30)	8.0423
95 (35)	6.5079
104 (40)	5.2976
113 (45)	4.3368
122 (50)	3.5696

Table G. Sensor Resistance

14. TROUBLESHOOTING

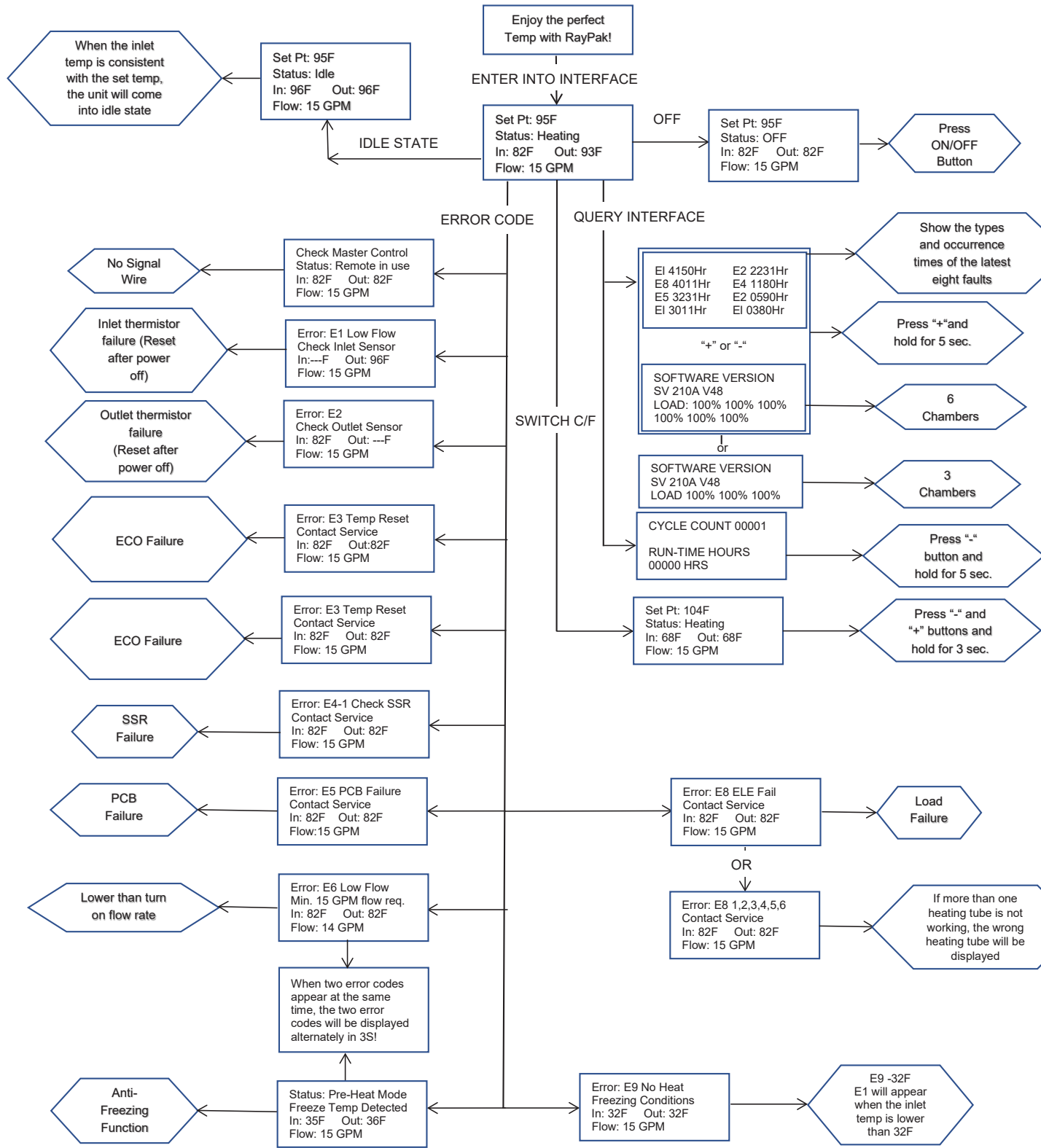
The E3T heater comes equipped with a very intuitive error code display that accurately points to potential causes of failure. Apart from that, please refer to **Table G** below for possible scenarios that might hinder the units performance.

Problem	Cause	Solution
Nothing happens when the thermostat is turned on.	Low flow (Unit Shows Error E6)	1. Check filter, skimmer basket, pump. 2. If a 2-speed pump is used, turn to high speed. 3. Check the flow sensor for any debris or obstruction.
	High limit has tripped	Contact service.
	Thermostat not calling for heat	Turn thermostat to higher temperature.
It takes a long time to heat the spa/ pool.	Low input voltage	Call the electric company.
	Undersized heater	Calculate temperature in heat rise °/hr. = Heater input (kw) x 410 divided by spa gallorage (This does not take into account heat loss due to weather).
	Heat loss from poor weather conditions (cold, high winds)	Use an spa cover.
	Defective heating element	Call an electrician.
Spa does not reach temperature.	Low flow	Check filter, skimmer basket, pump.
Heating element continuously burning out.	High input voltage	Call the electric company.
	Poor water chemistry	See "WATER CHEMISTRY" on page 4.
	Heating element split open	Over-acid condition. Watch pH, add acid slowly.
Fuses blow or circuit breaker opens.	Shorted heating elements	Replace element.
	Undersized wire	Replace field wiring.

Table H. Troubleshooting Guide

15. PROCESS FLOW DIAGRAM

The E3T heater has the ability to diagnose any errors accurately and display relevant codes. Apart from that the unit has several different screens that can be accessed by performing simple steps. Please see below flow chart for various options available.



16. WIRING DIAGRAMS

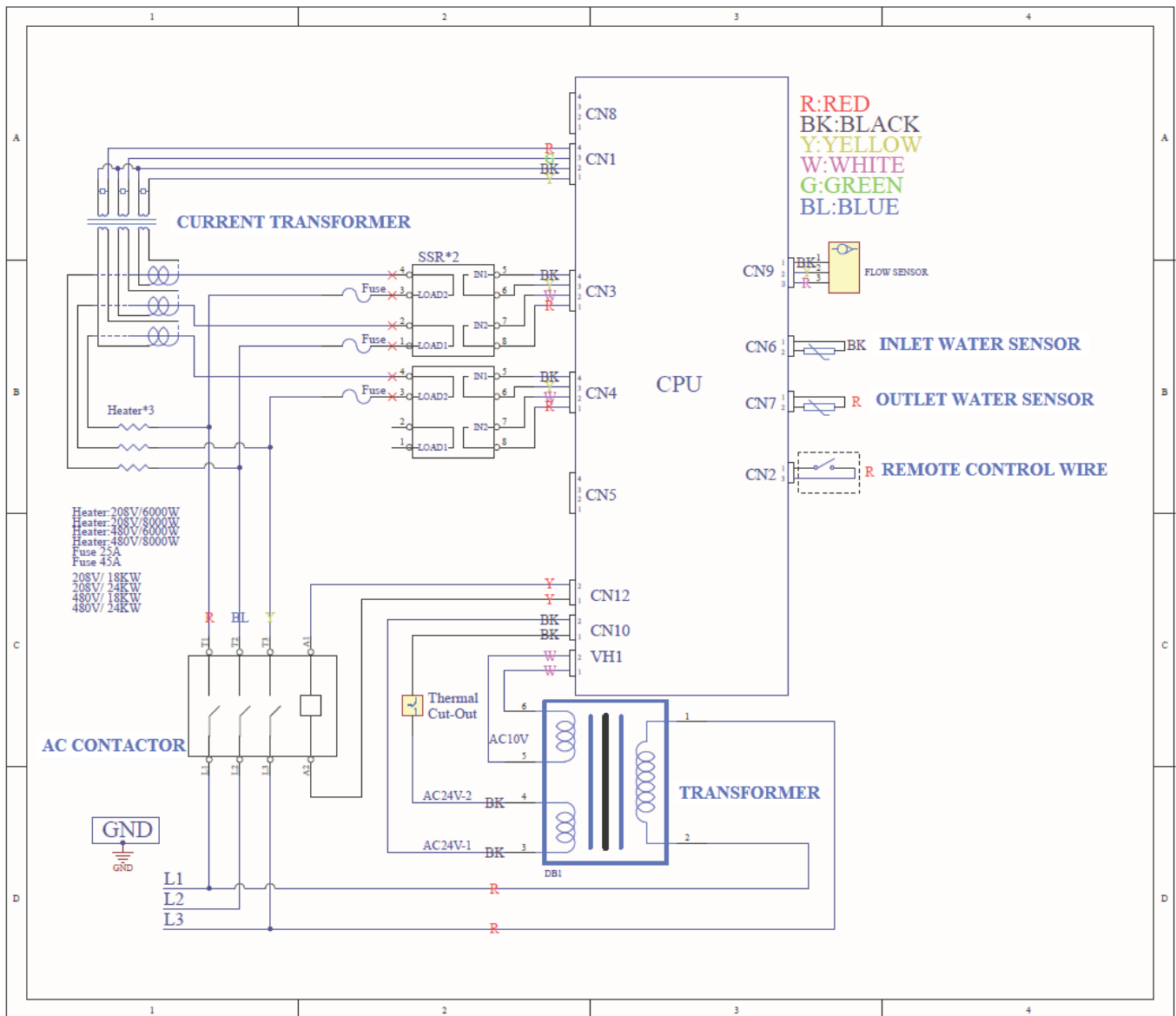


Figure 10. 3-Element Wiring Diagram (3-Phase)

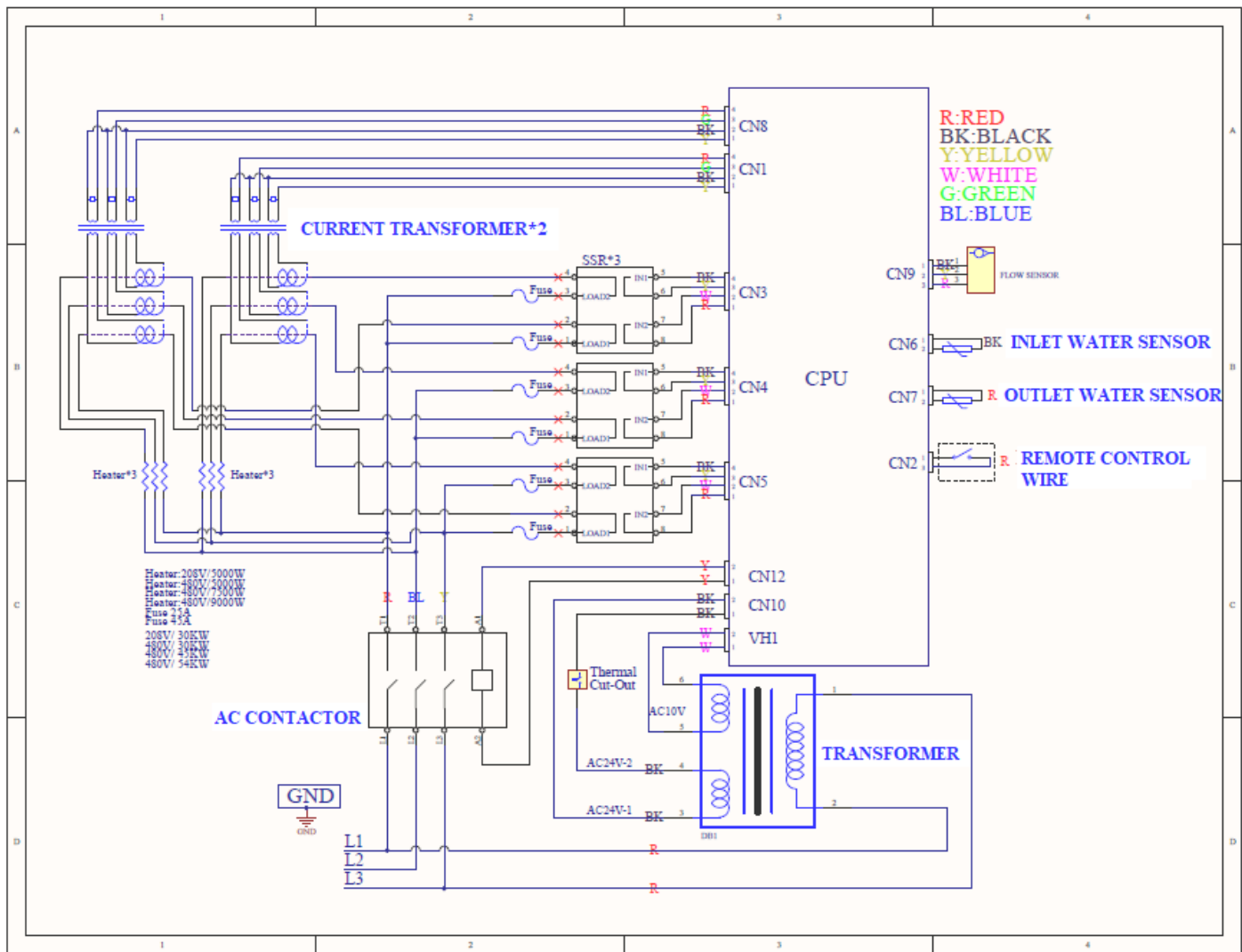
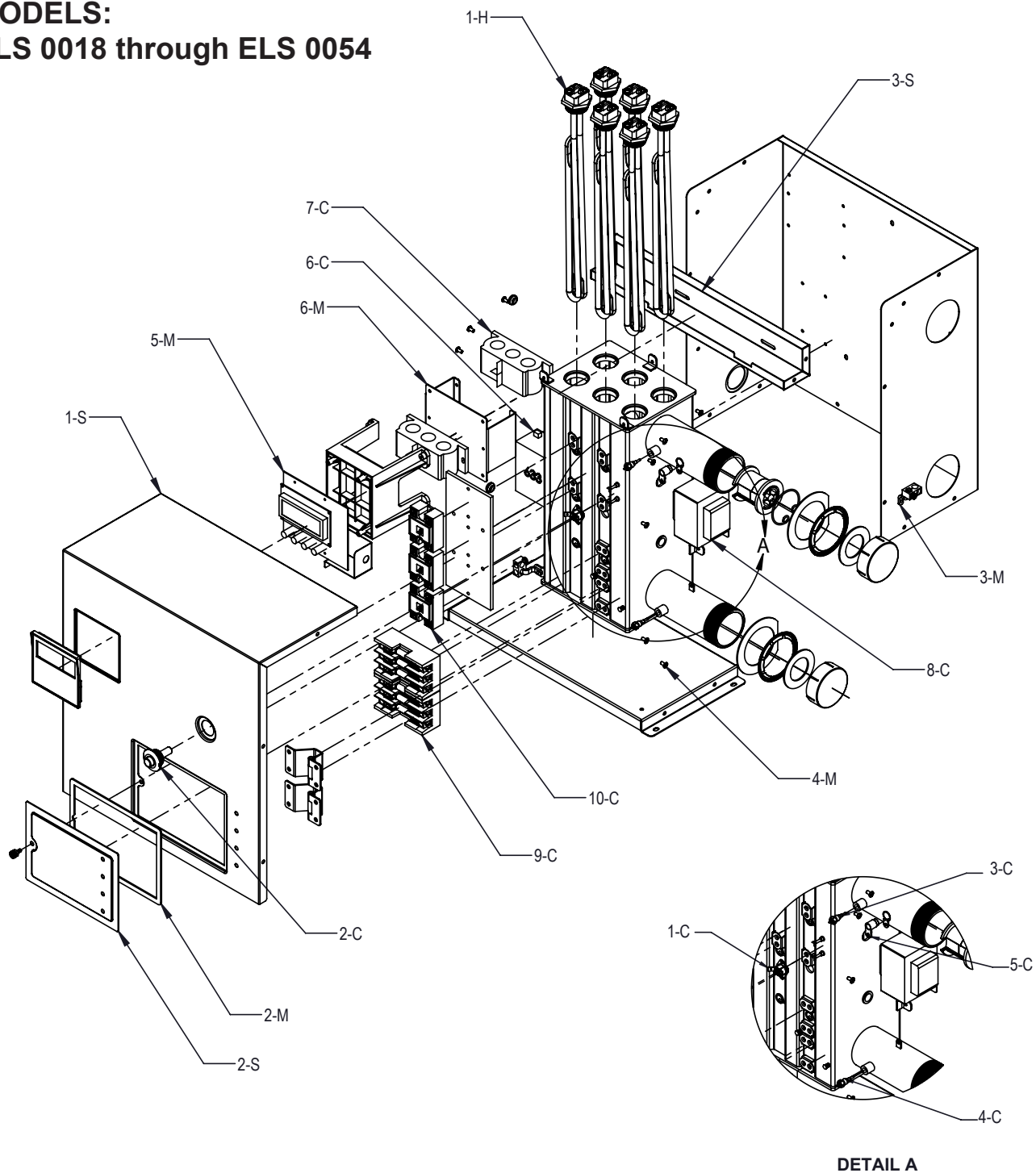


Figure 11. 6-Element Wiring Diagram (3-Phase)

17. ILLUSTRATED PARTS LIST

MODELS:

ELS 0018 through ELS 0054



CALLOUT	DESCRIPTION	18kW		24kW		30kW		45kW	54kW
		208V	480V	208V	480V	208V	480V	480V	480V
1-H	Kit - Elements	019378F	100-10000324	019379F	100-10000323	019380F	100-10000322	019381F	019382F
5-M	Kit - PCB board	019360F	019360F	019360F	019360F	100-10000326	100-10000326	100-10000326	100-10000326
7-C	Kit - Transformer Ring	019374F	019374F	019374F	019374F	019375F	019375F	019375F	019375F
8-C	Kit - Transformer	019362F	019389F	019362F	019389F	019362F	019389F	019389F	019389F
1-S	Kit - Front Panel	019355F	019355F	019355F	019355F	019356F	019356F	019356F	019356F
6-M	Kit - PC Board Mounting	019361F	019361F	019361F	019361F	019361F	019361F	019361F	019361F
3-C	Kit - Temp Sensor Outlet	019367F	019367F	019367F	019367F	019367F	019367F	019367F	019367F
4-C	Kit - Temp Sensor Inlet	019366F	019366F	019366F	019366F	019366F	019366F	019366F	019366F
9-C	Kit - Fuse Holder & Fuse 45A	019377F	N/A	019377F	N/A	019377F	N/A	N/A	N/A
	Kit - Fuse Holder & Fuse 25A	N/A	019376F	N/A	019376F	N/A	019376F	019376F	019376F
10-C	Kit - Relay Solid State 30-54KW	N/A	N/A	N/A	N/A	019359F	019359F	019359F	019359F
	Kit - Relay Solid State 18-24KW	019358F	019358F	019358F	019358F	N/A	N/A	N/A	N/A
6-C	Kit - Contactor 208V -HCDY3XQ07JS	N/A	N/A	N/A	N/A	100-10000325	N/A	N/A	N/A
	Kit-Contactor 480V -HCDY3XQ06CJ	N/A	019445F	N/A	019445F	N/A	019445F	N/A	N/A
	Kit - Contactor 208V -HCDY3XQ06CJ	100-10000320	N/A	100-10000320	N/A	N/A	N/A	100-10000320	100-10000320
4-M	Kit - Fasteners	019372F	019372F	019372F	019372F	019372F	019372F	019372F	019372F
3-M	Kit - Ground Terminal	019371F	019371F	019371F	019371F	019371F	019371F	019371F	019371F
2-M	Kit - Gaskets & Grommets	019370F	019370F	019370F	019370F	019370F	019370F	019370F	019370F
1-M	Kit - Plastic Unions (Not Shown)	019369F	019369F	019369F	019369F	019369F	019369F	019369F	019369F
5-C	Kit - Hall Sensor	019368F	019368F	019368F	019368F	019368F	019368F	019368F	019368F
3-S	Kit - Upper Cabinet Support	019365F	019365F	019365F	019365F	019365F	019365F	019365F	019365F
1-C	Kit - Manual Reset Button	019364F	019364F	019364F	019364F	019364F	019364F	019364F	019364F
2-C	Kit - Manual Reset Switch	019363F	019363F	019363F	019363F	019363F	019363F	019363F	019363F
2-S	Kit - Door Assembly	019357F	019357F	019357F	019357F	019357F	019357F	019357F	019357F

NOTES