

# E3T<sup>®</sup>

## ELECTRIC POOL & SPA HEATER COMMERCIAL SOLUTION



**Raypak<sup>®</sup>**  
A Rheem<sup>®</sup> Company

Electric pool and spa heating solution, providing best-in-class installation and performance.

AT RHEEM, WE'RE COMMITTED TO DOING WELL BY DOING GOOD.

## Our Global Progress



### Our Sustainability Goals



#### DEGREES OF INNOVATION

**Our 2025 goal:** Launch a line of heating, cooling and water heating products that boast a 50% reduction in greenhouse gas footprint.



#### DEGREES OF EFFICIENCY

**Our 2025 goal:** Reduce greenhouse gas emissions by 50% and achieve Zero Waste to Landfill in our global manufacturing operations.



#### DEGREES OF LEADERSHIP

**Our 2025 goal:** Train 250,000 plumbers, contractors and key influencers on sustainable products or sustainable installation and recycling best practices.

Proudly Recognized  
as a Sustainable Brand



2021, 2022, 2023 ENERGY STAR  
Partner of the Year



Eco-Leader for Five  
Consecutive Years



Awarded for our Rheem  
Prestige Series Variable  
Speed Heat Pump



**A Greater Degree of Good™**  
represents our global commitment  
to sustainability. Look for this  
badge throughout the training!

# WHAT YOU CAN DO



## Use Raypak's Sustainability to Sell

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Customers today increasingly want to buy from sustainable brands. Raypak is a leader in sustainability in our industry, and our commitment is a strong brand differentiator for us and for you.

**Help spread the word!**



## Promote High-Efficiency, Sustainable Products

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Two-thirds of consumers are not only interested in buying, but willing to pay more for sustainable products. **Recommend Raypak's**

**high-efficiency and Sustainability Standout options to customers.**



## Differentiate Yourself as a Sustainable Business

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When more of us go paperless, use eco-friendly glues and primers, recycle packaging, and drive fuel-efficient cars, it adds up

to a big difference for the environment. **Find new ways to go green in your daily routine.**



# YOUR PARTNER

IN THE POOL INDUSTRY • SINCE 1947

## THE POOL HEATING EXPERTS

- 75 years of expertise in manufacturing pool heaters
- Designing pool heaters for longevity in any application
- Investing in innovation while honoring timeless traditions



# E3T<sup>®</sup>

## COMMERCIAL SOLUTION

Based on voice of customer feedback  
we're delivering a best-in-class  
electric commercial pool and spa  
heating solution.

***Chlorine & Salt Water Ready***

All in One!

# PEACE OF MIND

E3T SINGLE-PHASE ELECTRIC COMMERCIAL POOL & SPA HEATER



**Raypak<sup>®</sup>**  
A Rheem<sup>®</sup> Company

# WHAT'S NEW?

## External Manual Reset Button

The cabinet no longer needs to be opened to access the reset button

## Increased Fault Code Identifiers

Ten unique codes (up from five) for enhanced data and troubleshooting.

## Low Temp Mode

Operates at reduced heating capacity to prevent water from freezing inside the unit.

## Freeze Protection

In freezing temperatures the unit will shut down to prevent damage.

## Element Failure Protection

The unit can continue to operate safely at reduced capacity in the rare event that an element fails.

*\* Applies to ELS0027 model only*

# E3T<sup>®</sup>



Original Model



Updated Model

# UPDATED FAULT CODES

CODE	DESCRIPTION	ACTION
E1	Inlet Sensor Fault	Buttons do not function, no heat. Need to replace sensor and restart unit.
E2	Outlet Sensor Fault	Buttons do not function, no heat. Need to replace sensor and restart unit.
E3	Thermostat Fault	Buttons do not function, no heat. Need to reset the thermostat and restart unit.
E5	PCB Fault	Buttons do not function, no heat. Need to replace PCB and restart unit.
E6	Low Water Flow Fault	The heater will resume working if water flow is higher than 14.5 gpm (55 lpm).
E7	Anti-Freeze Protection Fault	Inlet temp is lower than 36°F (2.2°C), and flow rate is lower than 14 gpm (53 lpm). The heater will heat at 1% heating capacity.
E8	Triac Failure Fault	If Triac #1 fails, display shows E8-1; If Triac #2 fails, display shows E8-2; If Triac #3 fails, display shows E8-3. The heater will cut off if any of the triacs fail, except for 27kW models, heater will continue to operate and heat if any one of the triac fails, until more triacs fail.
E9	Low-Temp Protection Fault	Inlet temp lower than 32°F (0°C), buttons do not function, heating will completely shut down.
E10	Remote Wiring is In-Use	The heater will not heat until the master control has a call-for-heat.
	Overheat Protection	The heater will stop heating if the water temperature exceeds 120°F (49°C), and resume heating if the water temperature is lower than 104°F (40°C).



# BEST-IN-CLASS

COMPACT, DURABLE, EASY-TO-INSTALL

## Designed To Last

Titanium heating elements and 316L marine-grade stainless steel withstand extreme pool water conditions, including chlorinated and salt water pools.

Solid-state design and flow sensor technology allow for smooth operation.

Compact and easy to install, makes it ideal for replacement and new builds.



# SAFEGUARDING YOUR INVESTMENT

BUILT-IN SAFETY FEATURES THAT PROLONG THE LIFE OF THE HEATER



## Low Temp Mode

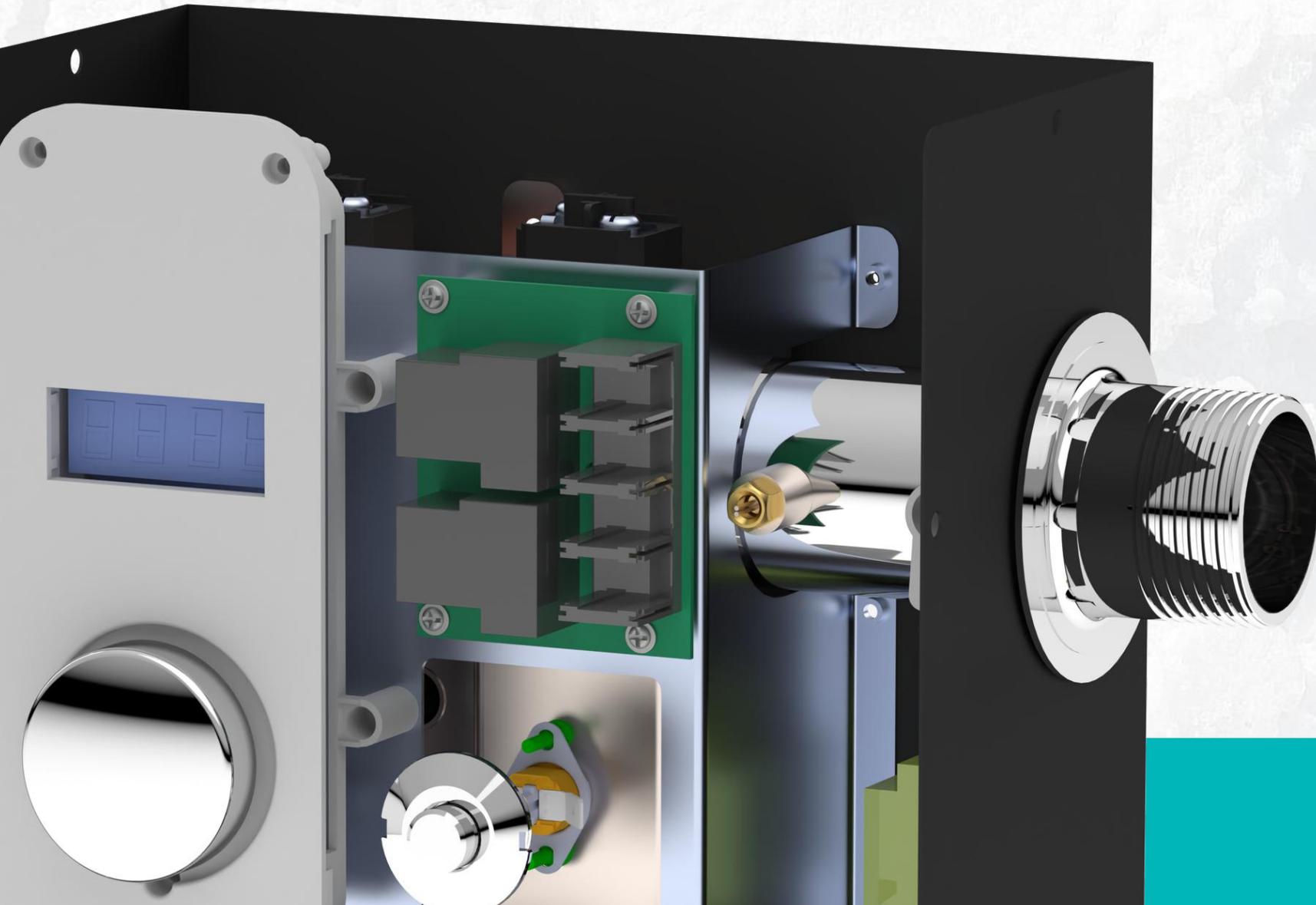
If the inlet temp is lower than 36°F (2.2°C) with sufficient flow rate, the heater will operate at reduced heating capacity to prevent water from freezing inside the unit and return to normal operation once the inlet temp reaches 40°F (4.5°C) and meets the minimum flow rate.

## Freeze Protection

If the Inlet temp is less than 32°F (0°C), the unit will shut down to prevent damage and the control buttons will not function.

# STRONG AGAINST THE SALTIEST CONDITIONS

SETTING THE BAR HIGHER WHEN IT COMES TO STANDARD



## Strength Is Our Standard

Whether or not your system is feeling exceptionally salty, this heater is ready out-of-the-box to stand up to the toughest of pool and spa conditions.

**No need to order a special model for salt water.**

**Raypak**<sup>®</sup>  
A Rheem<sup>®</sup> Company

# E3T SINGLE-PHASE MODELS

DESIGNED FOR INDOOR AND OUTDOOR USE



**ELS 0005-1-TiB**

5.5 kW

**ELS 0005-1-TiB**

11 kW



**ELS 0018-1-TiB**

18 kW

**ELS 0027-1-TiB**

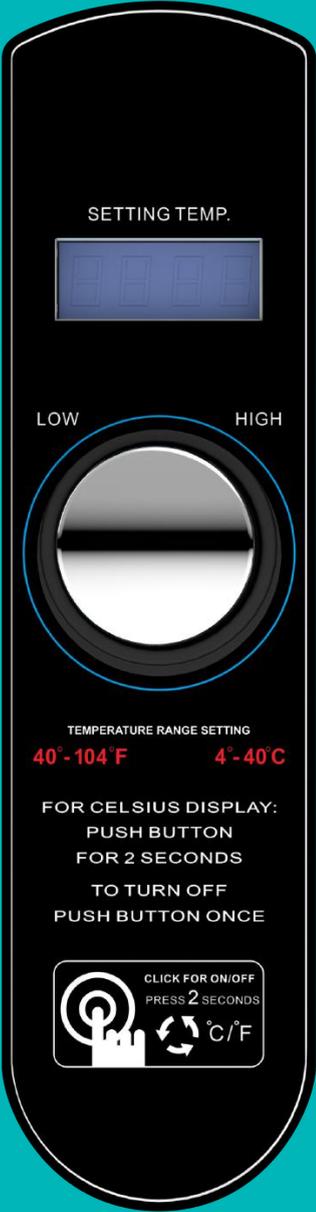
27 kW

**Raypak**  
A Rheem Company

# BEST-IN-CLASS CONTROLS

## Built-In Intelligence

The E3T is equipped with easy to use digital controls. Our control center shows the desired set point and lets you set the temperature exactly where you want it. The easy to read display allows you to see inlet and outlet temperature, flow rate, and code alerts.



# BEST-IN-CLASS CONTROLS



### Main Display



### Temperature



Inlet Temp



Outlet Temp



Flow Rate

### Cycle/Run Hour



Cycle Count



Run Hours

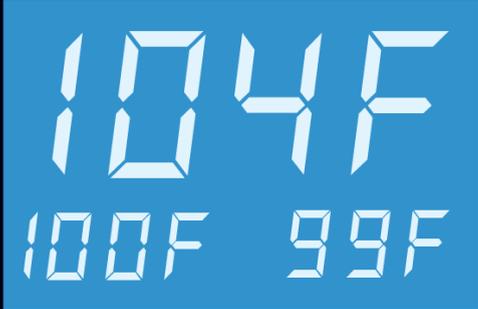


# BEST-IN-CLASS CONTROLS



## Main Display

Set Temp



Outlet Temp    Inlet Temp

Flow Temp



Outlet Temp    Inlet Temp

## Cycle

Flow Rate



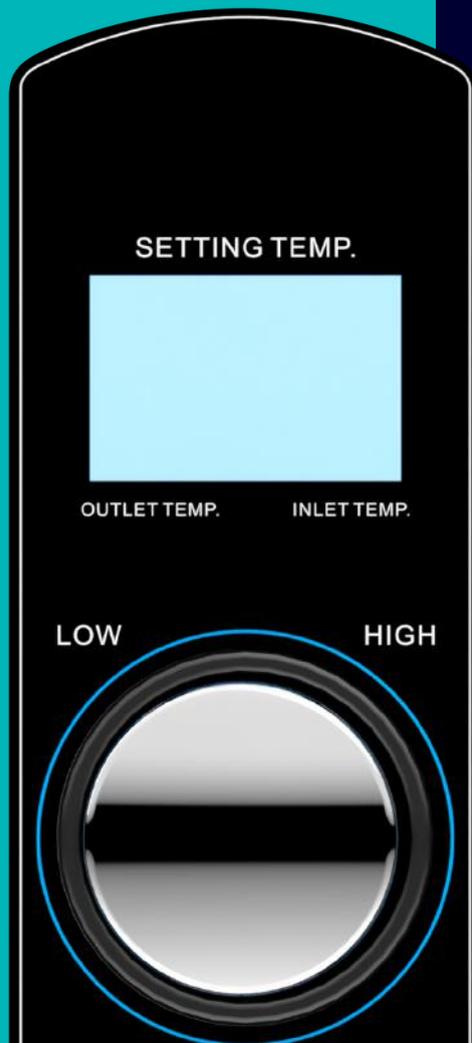
Cycle Count

## Run Hour

Flow Rate



Run Hours



# OPERATION

## Flow Protection

Prevents the unit from dry firing (15-60 GPM).

To access flow rate, press and hold the selector knob for five (5) seconds to display the flow rate. The unit will only function when the minimum flow rate is met.

## Time Delay Feature

After start up, there is a 1-minute delay before the unit energizes the heating elements. This ensures any air is flushed out of unit plumbing which may cause the element burn out.

# CONTROL

## Temperature Setting

The digital temperature control knob located in the front panel that can be easily set from 40°-104°F (4°C-40°C) in one (1) degree increments by rotating left or right.

Hold the knob for two (2) seconds to switch from Fahrenheit to Centigrade.

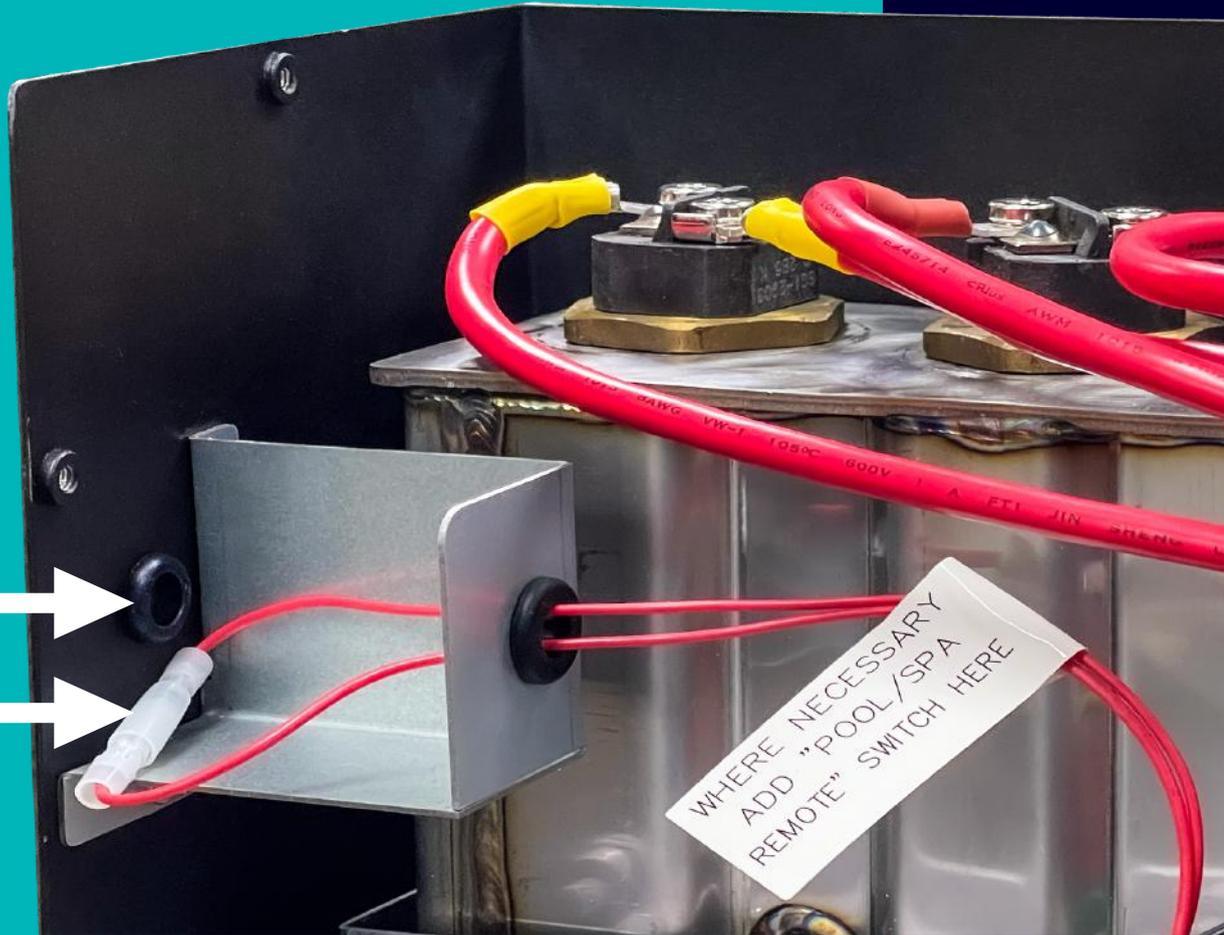
## Powering OFF

Turn the heater OFF by pressing the control knob once.



# REMOTE WIRING CONNECTIONS

Grommet hole  
for wire routing



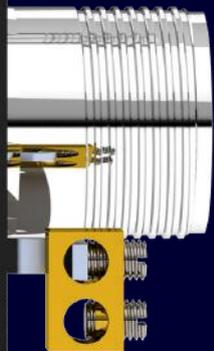
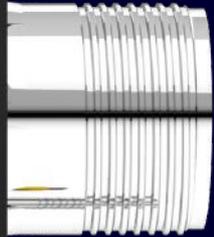
Two wire  
connector

The E3T is equipped to connect with external remote controls.

The included 2-wire connector supplies power out to either a toggle switch or the switch contacts of a third-party remote.

The unit does not need to be programmed to work with a remote control. Simply leave the unit ON at the desired temperature.

When the remote-control function is in use, the “E10” code will be displayed.



# MADE SIMPLE

FEATURES THAT JUST MAKE SENSE

## Manual Reset Button

Quickly reset the E3T on the front of the unit after a high temperature limit condition

## Quiet Operation

Solid State Relays equal quiet operation Compared to NOISY on/off RELAYS

## Reliable Relays

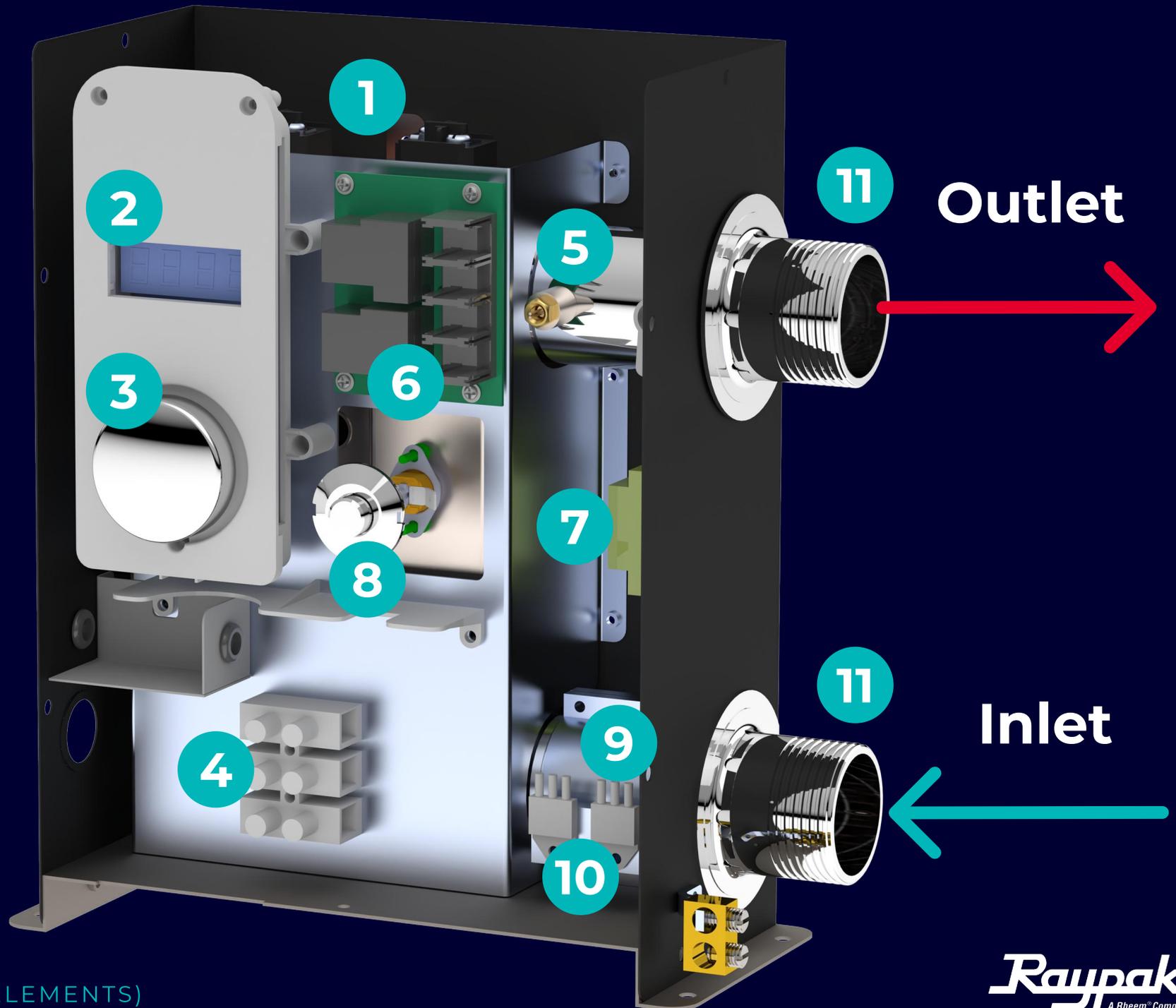
UP To 100M RELAY cycles equals longer lifespan



# A LOOK INSIDE

A snapshot of the internal components

- 1 Elements
- 2 LED Display
- 3 Control Knob
- 4 Terminal Block
- 5 Outlet Sensor
- 6 Relay
- 7 Transformer
- 8 Reset Button
- 9 Inlet Sensor
- 10 Triac 3-wire
- 11 Inlet/Outlet Water Connections  
(unions included)

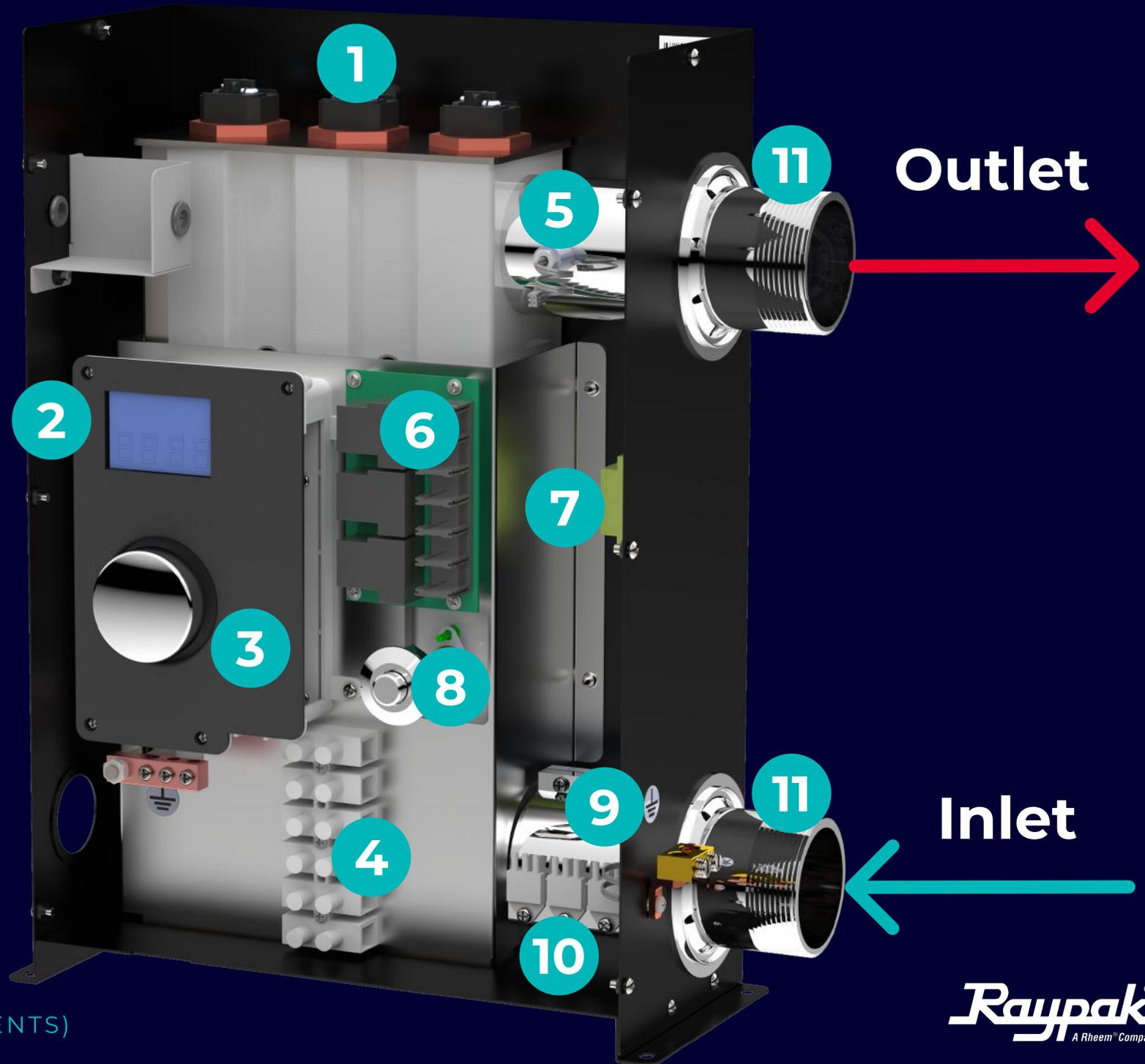


5.5KW & 11KW MODELS SHOWN (2 HEATING ELEMENTS)

# A LOOK INSIDE

A snapshot of the internal components

- 1** Elements
- 2** LED Display
- 3** Control Knob
- 4** Terminal Block
- 5** Outlet Sensor
- 6** Relay
- 7** Transformer
- 8** Reset Button
- 9** Inlet Sensor
- 10** Triac 3-wire
- 11** Inlet/Outlet Water Connections  
(unions included)



18KW & 27KW MODELS SHOWN (3 HEATING ELEMENTS)

# WATER CONNECTION

## 5.5kW & 11kW

1 ½" NPT inlet and outlet plumbing connections

## 18kW & 27kW

2" NPT inlet and outlet plumbing connections



# COMPETITIVE ADVANTAGE



## E3T SINGLE-PHASE VS COATES SINGLE-PHASE

	Raypak	Coates ST, CE, CPH	Raypak Benefit
Quiet Operation	YES	NO	Raypak uses triacs instead of contactors in the circuit design to ensure superior reliability and quieter operation.
Error Code Display	Alpha-Numeric	Alpha-Numeric	The Raypak E3T can diagnose and report a wider range operational data and unit issues with no need to decipher status light indicators.
Temperature Display	YES	Select Models Only	Raypak E3T heaters can display both inlet and outlet temp. The 18kW and 27KW models display inlet and outlet temps simultaneously.
Flow Rate Display	YES	NO	The flow rate can be viewed by simply pushing and holding the control knob for 5 seconds.
Time-Delay Protection	YES	NO	The unit also has a one (1) minute built-in TIME DELAY to protect it from air in the lines and to avoid burning out the elements. The unit activate when the required flow rate is met.
Low-Temp Operating Mode	YES	NO	If the inlet temp is lower than 36°F (2.2°C), and flow rate is less than 14 gpm (53 lpm), the heater will operate at reduced heating capacity to prevent water from freezing inside the unit.
Anti-Freeze Protection	YES	NO	If the Inlet temp is less than 32°F (0°C), the unit will shut down to prevent damage and the control buttons will not function.
Heating Elements	Titanium	Incoloy (Titanium Optional)	Only one model is needed to cover standard or salt-water applications
Remote Operation	YES	ST: No Remote Connection CE & CPH: Remote Connection	All Raypak E3T Single-Phase models offer 2 and 3-wire remote connection.

# COMPETITIVE ADVANTAGE

## E3T SINGLE-PHASE VS COATES SINGLE-PHASE



Raypak E3T Single Phase				Coates Single Phase			
Model	kW	BTU/hr	Voltage	Model	kW	BTU/hr	Voltage
ELS-R-0005-1-TiB	5.5	18,772	240	12406ST	5.5	18,772	240
ELS-R-0011-1-TiB	11	37,543	240	12411ST	11	37,543	240
ELS-R-0011-1-TiB	11	37,543	240	12412CE	12	40,946	240
ELS-R-0018-1-TiB	18	61,419	208	12418CE	18	61,419	240
ELS-R-0027-1-TiB	27	92,128	208	12424CPH	24	81,891	240
ELS-R-0011-1-TiB	11	37,543	240	12412PHS-CN	12	40,946	240
ELS-R-0018-1-TiB	18	61,419	208	12418PHS-CN	18	61,419	240
ELS-R-0027-1-TiB	27	92,128	208	12424PHS-CN	24	81,891	240

# SIMPLIFIED MODEL OFFERING

## ORIGINAL VS NEW MODEL CONVERSION CHART



Heating Capacity	Brand	Old Model		Updated Model		
		Model	Part Number	Brand	Model	Part Number
5kW	Raypak	ELS-R-0005-1-TI	017121	Raypak	ELS-R-0005-1-TiB	100-10000662
	Rheem	ELS-M-0005-1-TI	017125			
	RUUD	ELS-D-0005-1-TI	017129			
11kW	Raypak	ELS-R-0011-1-TI	017122	Raypak	ELS-R-0011-1-TiB	100-10000663
	Rheem	ELS-M-0011-1-TI	017126			
	RUUD	ELS-D-0011-1-TI	017130			
18kW	Raypak	ELS-R-0018-1-TI	017123	Raypak	ELS-R-0018-1-TiB	100-10000665
	Rheem	ELS-M-0018-1-TI	017127			
	RUUD	ELS-D-0018-1-TI	017131			
27kW	Raypak	ELS-R-0027-1-TI	017124	Raypak	ELS-R-0027-1-TiB	100-10000666
	Rheem	ELS-M-0027-1-TI	017128			
	RUUD	ELS-D-0027-1-TI	017132			

# LOGISTICS INFORMATION

## E3T SINGLE-PHASE ELECTRIC POOL & SPA HEATERS



Model	Item Number	Carton Qty (Units)	Product				ISTA Certification Level
			Weight		Dimensions		
			lbs	kg	in	cm	
ELS 0005-1-TiB	100-10000662	3	14.3	6.5	9 x 4.7 x 12.2	22.8 x 12 x 30.9	2A
ELS 0011-1-TiB	100-10000663	3	15	6.79	9 x 4.7 x 12.2	22.8 x 12 x 30.9	
ELS 0018-1-TiB	100-10000665	2	24.7	11.22	11.1 x 5.4 x 16.5	28.3 x 13.8 x 42	
ELS 0027-1-TiB	100-10000666	2	25.9	11.77	11.1 x 5.4 x 16.5	28.3 x 13.8 x 42	

# PACKAGED LOGISTICS INFORMATION



## E3T SINGLE-PHASE ELECTRIC POOL & SPA HEATERS

Model	Item Number	Carton Qty (Units)	Packaged Unit				Carton Pack				ISTA Certification Level
			Weight		Dimensions		Weight		Dimensions		
			lbs	kg	in	cm	lbs	kg	in	cm	
ELS 0005-1-TiB	100-10000662	3	20.8	9.44	14.2 x 7.1 x 18.5	36 x 18 x 47	65.3	29.62	20.1 x 23.6 x 15.2	51 x 60 x 38.5	2A
ELS 0011-1-TiB	100-10000663	3	21.5	9.74	14.2 x 7.1 x 18.5	36 x 18 x 47	67.3	30.52	20.1 x 23.6 x 15.2	51 x 60 x 38.5	
ELS 0018-1-TiB	100-10000665	2	34	15.4	17 x 8.1 x 23.4	43 x 20.5 x 59.5	71	32.2	25.2 x 18.1 x 18.1	64 x 46 x 46	
ELS 0027-1-TiB	100-10000666	2	35.2	15.9	17 x 8.1 x 23.4	43 x 20.5 x 59.5	73.5	33.32	25.2 x 18.1 x 18.1	64 x 46 x 46	

# SALES ORDER GUIDLINES



## Ordering Requirements

- 1 unit/box minimum per order.
- No palletization requirements for ordering units.



## Lead Times

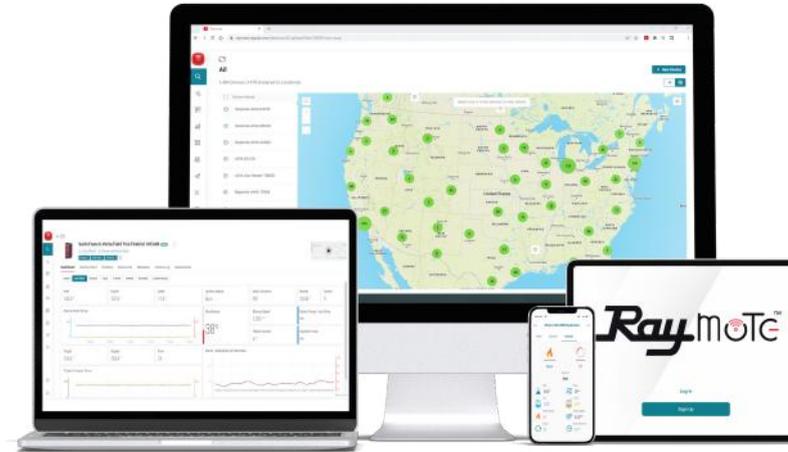
- IN STOCK NOW
- Special order: 50 business days



## Service Kits

- Service parts available now, see [9001.30 - Commercial Parts Price Book \(PDF\)](#) for part numbers and prices.

# Ray mote<sup>®</sup>



[raypak.com/raymote](http://raypak.com/raymote)



**Data Logging**



**Optimize Performance**



**Remote Factory Support**



**24/7 Visibility**



**Service Alerts**



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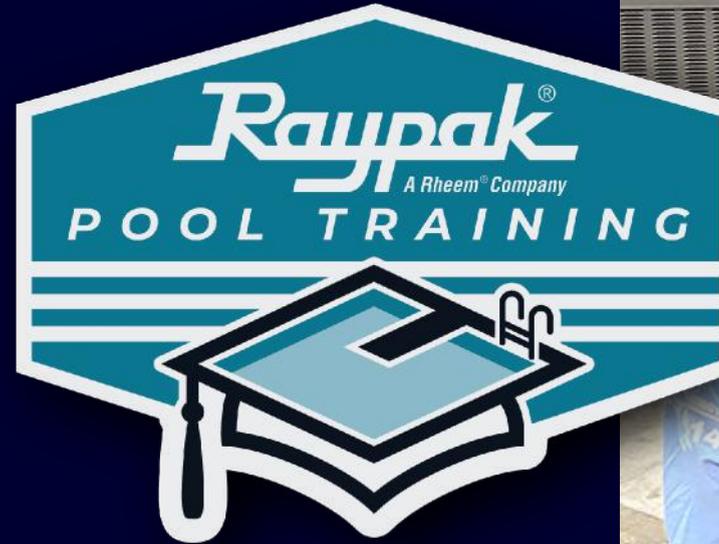
# INNOVATION LEARNING CENTERS



## HANDS ON TRAINING

Our trainings range from basic product introductions to advanced controls integration.

- Oxnard, California
- Lewisville, Texas
- Roswell, Georgia
- Lawnside, New Jersey
- Waterbury, Connecticut



# POOL TRAINING RESOURCES



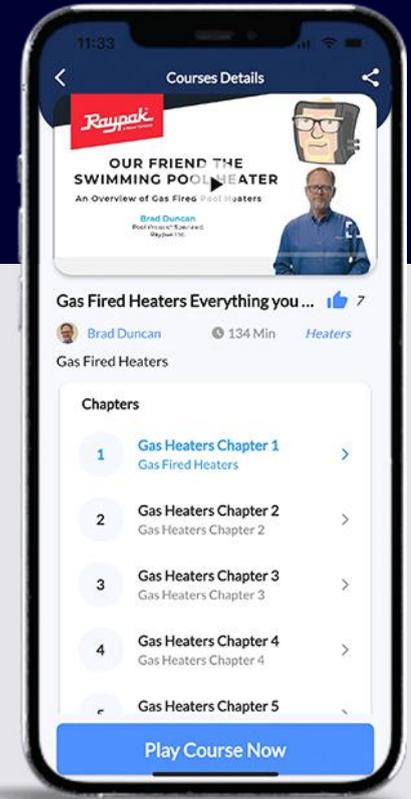
## EVEN MORE TRAINING OPPORTUNITIES

Find the latest training information for in-person events and online training resources on our website.

[raypak.com/training](http://raypak.com/training)



# POOL MAN UNIVERSITY PARTNERSHIP



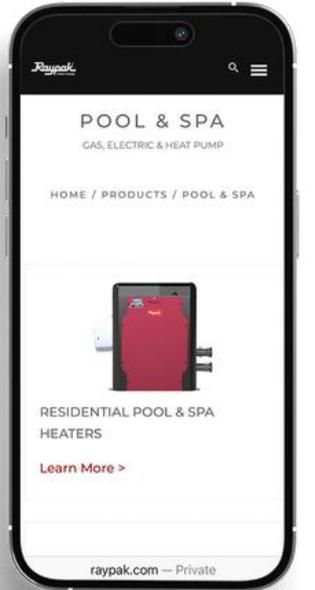
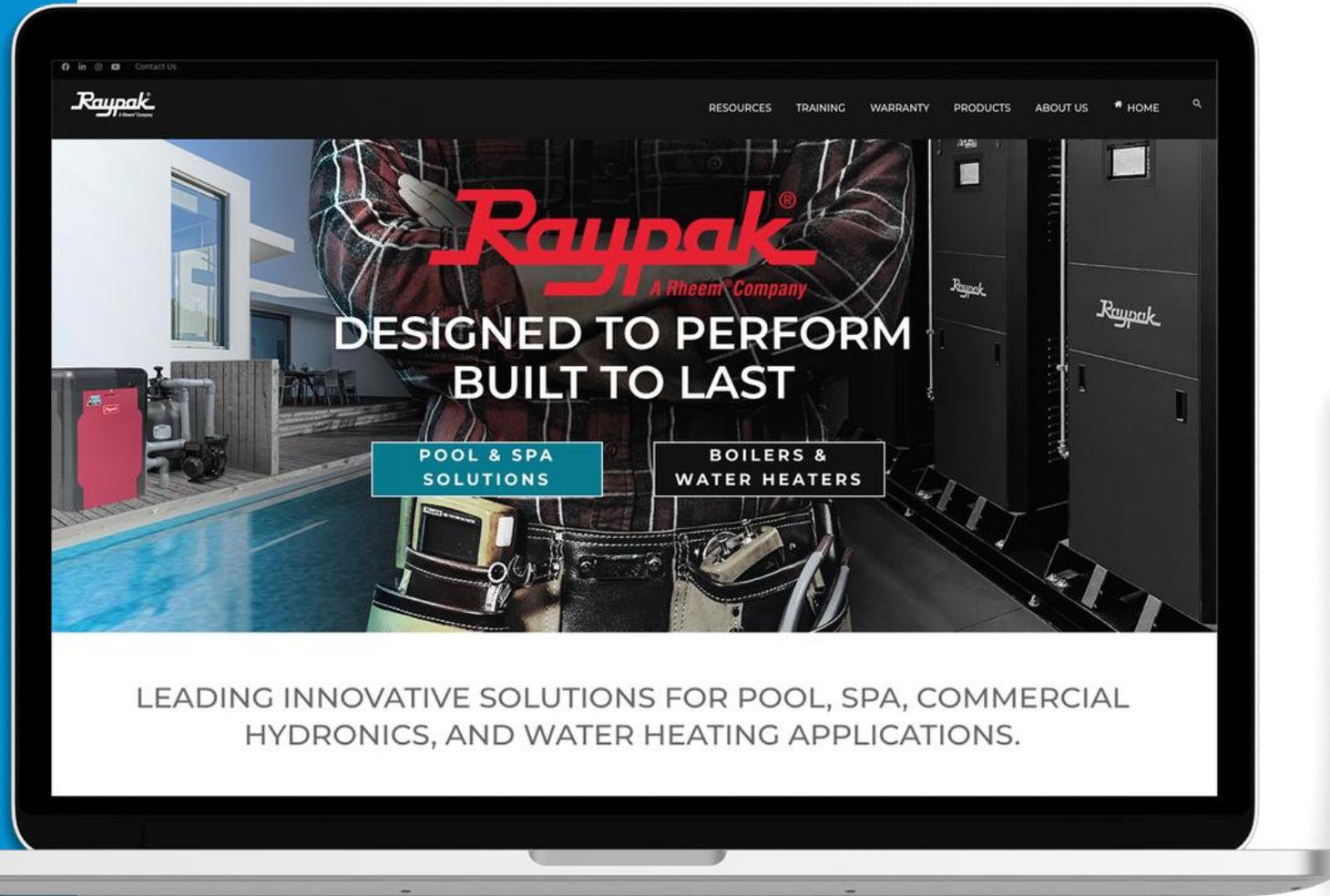
## EXCLUSIVE POOL HEATER TRAINING PARTNER

Supporting the swimming pool service, repair and construction industry through the Pool Man University platform.



# raypak.com

- Installation & Operation Manuals
- Submittal & Spec Sheets
- Plumbing & Wiring Diagrams
- Product Sizing Calculators
- Product Catalogs & Brochures



- Product Training Videos
- How-To Videos
- Marketing Videos

[www.youtube.com/raypakchannel](http://www.youtube.com/raypakchannel)



For product support, call:  
**805-278-5300**



**Applications Support**



**Sales & Sizing Support**



**Large Equipment Factory Startup**



**Technical Support**

# THANK YOU FOR LISTENING!

Learn more about us at [raypak.com](http://raypak.com), follow us on social media to stay up-to-date on the latest Raypak innovations, and visit [RaypakTraining.com](http://RaypakTraining.com) for more resources.

   @officialraypak

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