

T-SERIES

Teflon® Series Deionized Water Heating Systems



TREBOR T-Series electric DI water heaters meet or exceed industry safety, performance, and purity requirements. Each system includes the latest in state-of-the-art control circuitry for optimum performance and reliability within a compact 2' by 2' footprint.

The T-Series uses TREBOR's proprietary Teflon® immersion heating modules for proven-reliable, high purity heating. The low watt density, low thermal mass resistance heating design produces fast response to changes in flow or temperature set point.

Modular system construction simplifies maintenance and accessibility.

A proven performance record and quality construction result in 99% plus up-time and low cost of ownership: making T-Series Heaters an excellent process investment.

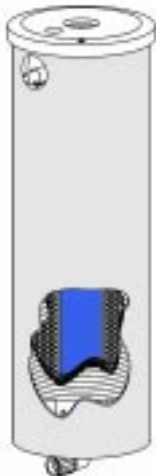


Illustration of an 18kW modular cell is shown. This cell is used in all TREBOR Teflon heaters. The low thermal mass and low watt density allows for quick system response.

T - S E R I E S F E A T U R E S

PERFORMANCE

- Rapid response to changes in flow and temperature
- Precise $\pm 1^\circ\text{C}$ steady state temperature control
- Pressure drop less than 3 psi at 4 gpm
- Water temperatures up to 90°C
- PID control with zero cross fire SSR power modulation
- Save DI water – no purge valve required (purge required only to maintain purity)
- PLC diagnostics and fault retention

CONSTRUCTION

- High purity PTFE, PFA and PVDF flow path
- No elastomer O-rings
- Powder coated metal cabinet
- Low watt density electrical resistance heating
- CE certified
- Built to S2-93 guidelines
- One year warranty

SAFETY FEATURES

- Redundant safety features for maximum protection of operators and equipment, including:
 - Circuit breaker
 - Liquid level detection
 - Low pressure sensor
 - Over pressure relief
 - Emergency OFF button
 - Over temperature control
 - System leak sensor
 - LED Diagnostics
 - Audible fault alarms
 - Automatic power shut down
 - Multiple operator safety devices

TREBOR
INTERNATIONAL

T - S E R I E S

SPECIFICATIONS

Model	Output	3-Phase Voltages 50/60 Hz	Amperage Nominal/Service	Shipping Weight
T72	72 kW	480 V	86/100	550 lbs. (250 kg)
	54 kW	415 V		
	50 kW	400 V		
	45 kW	380 V		
T108	108 kW	480 V	130/150	600 lbs. (273 kg)
	81 kW	415 V		
	75 kW	400 V		
	68 kW	380 V		

- Recommended minimum operating pressure: 30 psig (2.1 kg/cm²)
Maximum operating pressure: 60 psig (4.2 kg/cm²)
- May be operated at source voltages shaded in pink, specify operating voltage when ordering

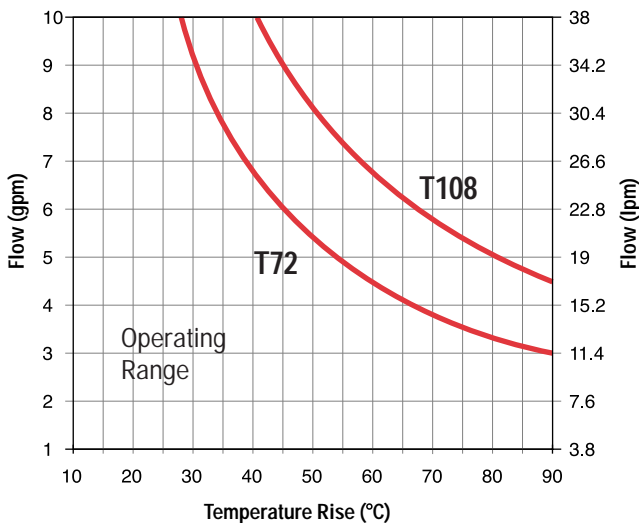
OPTIONS

Options for all T-Series systems:

- Resistivity monitor – single or dual probe
- Front or floor panel plumbing hookup options (rear panel hookup is standard)
- 9-Pin serial connector for RS-232 or RS-485 interface
- GFCI circuit breaker

Other options are available, consult factory.

HEATING CAPACITY



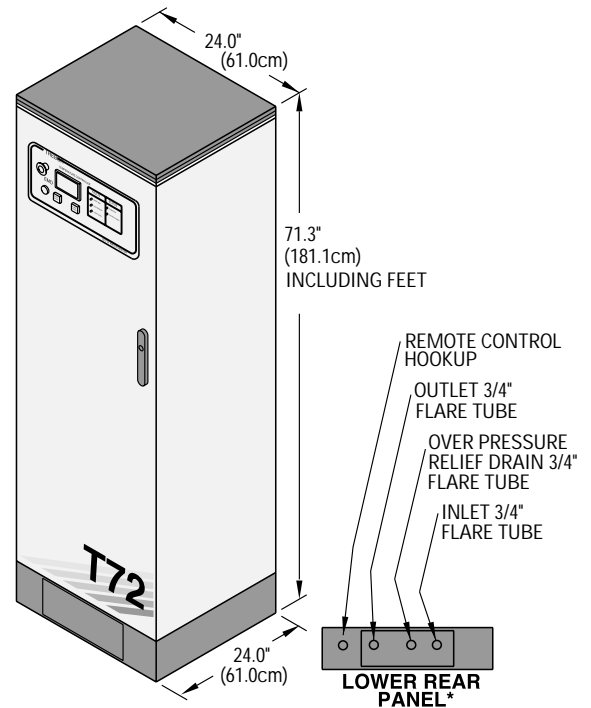
Use the following formula to approximate the required power output for your application. We recommend oversizing your system by 20% to provide optimal control range.

$$kW = .264 (\text{flow in gpm}) (\Delta T \text{ in } ^\circ\text{C})$$

INSTALLATION

- Single point power connection through top or bottom (see specifications for voltage options)
- 3/4" flare tube plumbing connections
- Small footprint: 2' x 2' (61cm x 61cm) (requires access to front and back)

DIMENSIONS



* Optional front panel or floor connections available.

The T72 and T108 have the same dimensions and hookup locations.

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