



240V SUPERCHARGER

MICROPROCESSOR FLOW & TEMPERATURE CONTROL

ELECTRIC TANKLESS WATER HEATERS

240V SUPERCHARGER MODELS:

Model	Voltage	kW	Amps
SC70	240	7.0	29.2
SC90	240	9.0	37.5
SC140	240	14.0	58.4



- The Supercharger is a new technology designed to connect to a hot water tank or tankless regardless of its primary heating source (gas, electric, solar, heat pump, geothermal, heat recovery).
- The Supercharger is designed to avoid scald potential by not heating water that is already hot and only incrementally adding the precise amount of heat to maintain the desired set point.
- It can recognize very small temperature changes so as the water from the primary heat source drops below its pre-set desired temperature, the Supercharger increments the heat required to maintain the constant temperature within 1.5 degrees.

APPLICATIONS:

- Whole House: Extend the effective output of all tank water heaters and add endless hot water. Solve problems associated with new NAECA efficiency regulations.
- Mount at or near the “hot water supply” for a cluster of fixtures (e.g. bathroom), to eliminate wait for hot water and to significantly increase the “hot water supply” from tank type water heaters – Use multiple heaters to provide rapid hot water for several zones.
- Gas Tankless Water Heaters: Add to a standard gas tankless to eliminate “cold water sandwich effect” and provide hot water for low flow draws from lavatory faucets and high efficiency dishwashers. Provide heat for **recirculation loops**. Can be mounted adjacent to gas tankless for hybrid system or to multiple Point of Use fixtures to reduce wait for hot water.
- Solar, Geothermal, and Heat Pump: Use in lieu of heating element in tank and don't reheat the entire tank full of water when you only need a few gallons more. Allow Supercharger to heat only the incremental water used and only add the additional heat actually needed, when the primary source proves insufficient. Significant improvement in efficiency over supplementary heating elements located in the tank.

FEATURES:

- *Digital microprocessor control provides precise temperature and flow control without flicker or other power quality issues*
- *Activates at less than 0.30 GPM*
- *UL listed and tested to UL499 Appliance and more stringent UL834 Space Heating standard*
- *Control tested by UL to meet temperature limit control requirements of UL 353 and CSA C22.2*
- *Standard ¾" NPT plumbing connections with no flow restrictions*
- *Compatible with all plumbing designs including recirculating, tubing and manifold systems*
- *Uses field-replaceable immersion heating elements*
- *Dry-Fire Protection – cannot dry fire elements*
- *Self-diagnostics including leak detection shut-down and Water level detect – No more heating element burnout*
- *Constructed of DuPont Engineering Polymers for strength and reduction of scaling potential*
- *UL Listed and certified to ANSI 61 and 372*
- *Ten Year Limited Warranty (See written warranty for complete details)*

240V SUPERCHARGER MODELS:								
			Breaker	Wire cu	Temp Rise @ GPM			
Model	Voltage	kW	AMPS	AWG	1	1.5	2	2.5
SC70	240	7	30	10	48	32	24	19
SC90	240	9	40	8	61	41	31	25
SC140	240	14	60	6*	96	64	48	38

*Use conductors rated for 75° C -- Consult NEC and Local Codes for Breaker and Wire Sizing
 240 Volt Models can also be used on 208 Volts - kW output reduced to 75%

Model	Gallon	1st Hour			Add a SC90		Add a SC140		New Size
		Storage	Recovery	Total	1st Hour	Increase	1st Hour	Increase	
30,000 BTU Gas	30	22.5	39.0	62	53	86%	82	133%	50+
4500W Electric		22.5	26.3	49	53	109%	82	168%	
30,000 BTU Gas	40	30.0	39.0	69	53	77%	82	119%	60+
4500W Electric		30.0	26.3	56	53	94%	82	146%	
30,000 BTU Gas	50	37.5	39.0	77	53	69%	82	107%	80+
4500W Electric		37.5	26.3	64	53	83%	82	129%	

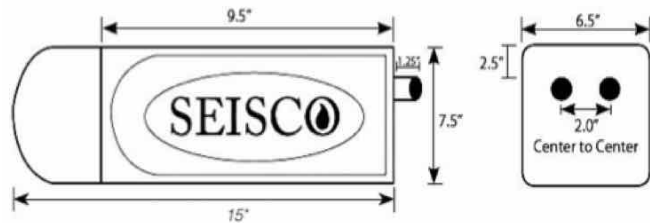
Continuous Hot Water Rate in Recovery - Tank/Supercharger Combined GPM by Model

	SC70		SC90		SC140		SC180		
	ΔT:	35°F	70°F	35°F	70°F	35°F	70°F	35°F	70°F
30,000 BTU Gas		2.7	1.3	3.1	1.5	4.0	2.0	4.8	2.4
4500W Electric		2.2	1.1	2.6	1.3	3.6	1.8	4.4	2.2

Gas Tank at 75% recovery efficiency, Electric Tank at 100%, ΔT is the difference between incoming and outgoing water temperatures

Specifications:

Weight: 9 lbs. (4 kg)
 Height: 7½" (190.5 mm)
 Length: 15" (381.0 mm)
 Depth: 6½" (165.1 mm)
 Fittings: ¾" NPT
 Power: 208-240V, 50/60Hz
 Maximum Operating Pressure: 100 PSI
 Thermal Efficiency: 96%+
 Temp. Output (dial): 90°F to 130°F
 Factory Temp Setting: 115°F



SUGGESTED WRITTEN SPECIFICATION

Seisco tankless water heater model _____ as manufactured by Seisco International, shall have a 10-year limited warranty. Heater shall have a rated input of _____ kW at _____ Volts. Heater shall be UL listed and tested to UL 499 Small Appliance standard *and* more stringent UL 834 Space Heating/Small Boiler standard and meet both NSF/ANSI 61 and 372. Electrical control of the heater must be accomplished using an integrated microprocessor that uses thermistors for sensing both temperature and flow. Heaters shall include water level sensing and temperature control via the microprocessor. Automatic high temperature shutoff shall be accomplished using its control tested by UL to meet the temperature limit control requirements of UL 353 and CSA C22.2. Heaters shall have built-in self-diagnostics with an LED and speaker and must visually and audibly signal the status of all monitored functions. Heaters shall have built-in water leak detection with automatic heating shutdown. Heater must have easy clean-out access for removing sediment.

**Limited Warranty-See written warranty for details.*