



240V SUPERCHARGER

MICROPROCESSOR FLOW & TEMPERATURE CONTROL

ELECTRIC TANKLESS WATER HEATERS

FLAGSHIP SERIES 240V SUPERCHARGER MODELS:

Model	Voltage	kW	Amps
SC70	240	7.0	29.2
SC90	240	9.0	37.5



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:

Extend Tank Water Heaters: Add to a standard tank water heater to provide continuous hot water sufficient to supply a single shower continuously after the hot water in the tank has been exhausted. Provide sufficient hot water to keep a garden or jetted tub warm after using the capacity of the tank to fill it. Provide endless hot water for laundry immediately after everyone has had his or her morning shower or evening bath.

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. Can be mounted adjacent to gas tankless for hybrid system or at the Point-of-Use to reduce wait for hot water.

Solar, Geothermal, and Heat Pump: Use in lieu of heating element in tank. Allow Supercharger to heat only incremental water used when primary source proves insufficient.

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 499 Listed for Water Heating Applications
- Mounts horizontally or vertically for maximum flexibility - mounts above or below the point of use
- Patented internal mixing to prevent scalding
- Standard 3/4" NPT plumbing connections with no flow restrictions (adapters included to 1/2" NPT for POU)
- Saves energy and water: Activates only on demand and mounts at point of use
- Compatible with all plumbing designs including recirculating, tubing and manifold systems
- Uses standard field-replaceable immersion heating elements
- Self-diagnostics including leak detection shut-down and Water level detect - No more heating element burnout
- High performance DuPont™ Zytel® nylon chamber material with rugged DuPont™ Crastin® PBT polyester case
- Rust & corrosion resistant - UL Classified in accordance with NSF/ANSI 372 to meet or exceed all current lead in drinking water requirements
- Ten Year Limited Warranty (Chamber Body guaranteed against failure for three years. Circuit board for 18 months. Other components and Labor for 1 year, Prorated for 10 Years. See written warranty for complete details)

FLAGSHIP SERIES POU MODELS:

Model	Voltage	kW	Breaker Amps	Wire cu AWG	Overall Length	Temperature Rise °F at GPM					
						0.50	0.75	1.00	1.50	2.00	2.50
SC70	240	7.0	30	10	15"	96	64	48	32	24	19
SC90	240	9.0	40	8	15"	123	82	61	41	31	25



CONSULT NEC AND LOCAL CODES FOR FINAL DETERMINATION ON ALL BREAKER AND WIRE SIZING

The GPM* chart below shows the flow rates for hot water deliverable at 115°F (and 105°F), based on the water temperature in the tank, and the combined heating capacity of the tank PLUS the Supercharger. The performance chart demonstrates, as the water temperature in the tank declines, the combined capacity to provide hot water flow also declines but generally remains more than sufficient to provide that hot water needed to allow for a tempered 105°F hot shower "Endlessly".



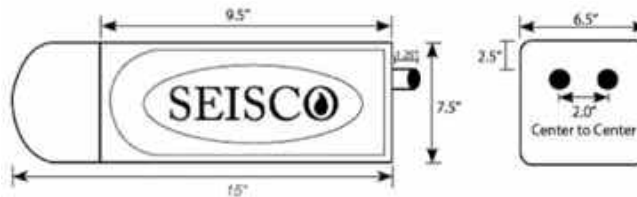
SUPERCHARGER PERFORMANCE					GPM @ 115°F w/Tank Temp				GPM @ 105°F w/Tank Temp			
Model	Tank	SC BTU	Tank BTU*	Total BTU	90	80	70	60	90	80	70	60
SC70	Electric	3,652	15,051	38,703	3.1	2.2	1.7	1.4	5.2	3.1	2.2	1.7
SC90	Electric	30,410	15,051	45,461	3.6	2.6	2.0	1.7	6.1	3.6	2.6	2.0
SC70	Gas	23,652	30,000	53,652	4.3	3.1	2.4	2.0	7.2	4.3	3.1	2.4
SC90	Gas	30,410	30,000	60,410	4.8	3.5	2.7	2.2	8.1	4.8	3.5	2.7



*Burner/Element thermal efficiency in use assumes 40,000 BTU Gas Tank @ 75% and 4500 Watt Electric Tank @ 98% efficiency (ignores standby loss portion of thermal efficiency for continuous GPM calculation)

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



Mount at least 6" from all surrounding surfaces and 18" from flue of gas water heater. Unit must be mounted in dry conditioned space to protect from freezing. Use a pressure relief valve when mounting above first floor and a drain pan as required.



SUGGESTED WRITTEN SPECIFICATION

Seisco Supercharger tankless water heater model _____ as manufactured by Seisco International Limited, shall have a 5-year limited warranty*. Heaters shall have a rated input of ____ KW at ____ Volts. Electrical control of the heater must be accomplished using an integrated microprocessor that uses thermistors for sensing temperature and flow. Heater shall have patented internal mixing to avoid scalding. Heaters shall include water level sensing and temperature control via the microprocessor, and automatic high temperature shutoff. 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 shutdown. All water passages must be constructed of high temperature resistant DuPont® resin. Clean-out access for removing sediment must be provided without removing plumbing connections or electrical connections. Seisco is UL 499 approved and also classified in accordance with NSF/ANSI 372.

*Limited Warranty-See written warranty for details.

SEISCO INTERNATIONAL LIMITED

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Engineer/Architect: _____

Job Name: _____

Location: _____

Contractor: _____

Rep: _____

Specifications: _____