

**T**he Nyle Systems Geyser C-Series product line is a High Efficiency Air-to-Water or Water-to-Water Heat Pump Water Heating System. Heat Pump Water Heaters provide the most efficient way to heat water, drawing energy from the ambient air or available source water and thereby saving up to 75% in costs when compared to electric water heaters.

**U**pon using the air source models, air surrounding the C-Series is cooled and dehumidified, which can be ducted to an alternate location, while heating potable water. In utilizing the water source models, we are cooling source water on one side while heating potable water on the other. We are reducing air conditioning load as well as reducing heating costs.

**T**he C-Series are designed and manufactured in our state of the art facility located in Brewer, Maine. These units use various options to meet your application needs. They are suitable for drinking water applications with the optional double wall heat exchanger.

## Energy Efficiency

Performance is expressed in Coefficient of Performance (COP). In typical installations, the Geyser C-Series achieve COP's ranging from 3-5. This means it creates 3-5 units of renewable heat from the air, for every 1 unit of electricity required for operation. This 300% to 500% efficiency compares with efficiencies of traditional water heaters of approximately 70% for gas and oil, to 90% for electric water heaters. For all heat pumps, performance is impacted by a number of factors including the ambient air and water temperatures. The investment payback period is typically 1-3 years (based on energy prices).



## How does the GEYSER C-Series work?

The Geyser Heat Pump Water Heater captures heat and humidity from the surrounding air, or heat from source water, and transfers that heat energy into a storage tank. In basic terms, Heat Pump Water Heaters move heat from where it is not needed, to where it is desired. The Geyser C-Series provides low cost water heating and supplemental cooling that can be directed where needed. The ability to duct the conditioned air provides even greater savings by possibly eliminating the need for air conditioning.

## Suitable Applications

The Geyser C-Series range in capacity from 25,000 BTUH to 250,000 BTUH, generating from 50 to 500 gallons of hot water per hour. These units can heat water efficiently up to 150° F and are ideally suited for restaurants, hotels, apartment buildings, laundry facilities, health care facilities, schools, sports arenas / gyms, military barracks and manufacturing facilities to name a few.

## Tailored to meet your needs

The Geyser C-Series has a range of base model Heat Pump Water Heaters that can be customized to meet your application needs. Available options include, centrifugal blowers, programmable logic controllers reversing defrost cycles, and 304 or 316 stainless steel cabinets.

## Key Features and Benefits

- ▶ Leaving water temperatures up to 150° F allows for consistent tank temperatures above 140° F
- ▶ Can be used as preheat system when higher temperatures are desired
- ▶ Typically operating at COP's from 3.0 to 5.0, meaning it is expected to save 60% - 75% versus the costs of running an electric water heater
- ▶ Can be connected to most storage tanks and water heaters, including: Electric, Oil, Natural Gas, Propane and Solar tanks
- ▶ The air surrounding the unit is being cooled and dehumidified, reducing the load on air conditioning systems, further increasing the savings
- ▶ The cooler, dehumidified air can be ducted to an alternate location by selecting the blower option
- ▶ Painted aluminum as well as optional stainless steel cabinet provides superior protection against corrosion. Coated coils for further protection come standard.
- ▶ Uses environmentally friendly R-134a refrigerant.
- ▶ Water- to -Water Heat Pumps can be used to per-chill water as well.
- ▶ Optional Programmable Logic Control (PLC) allows integration into your existing mechanical system

MODEL NUMBER	PERFORMANCE						Water Flow (GPM)
	Water Heating			Cooling Capacity		Combined C.O.P.	
	kW	Btu/hr*	C.O.P	Btu/hr*	C.O.P		
C25	8.1	27,400	4.72	21,800	3.76	8.48	5.4
C60	19.6	66,800	4.81	53,500	3.85	8.66	13
C125	41.4	141,300	4.4	110,500	3.44	7.83	28
C250	73.2	249,800	3.38	178,000	2.41	5.78	50

\* Performance rating based on 75° F entering air temperature at 60% relative humidity

\* Performance rating based on 100° F entering water temperature

Standard voltage on C25A & C60A models - 208/230 V, 1-phase, 60Hz.

Standard voltage on C125A & C250A models - 208/230 V, 3-phase. 60Hz.

Other power options are available upon request.

**Note:** In view of ongoing product improvements, design and specification are subject to change without notice. Nyle Systems can accept no responsibility for possible errors in catalogs, brochures or any other printed material.