

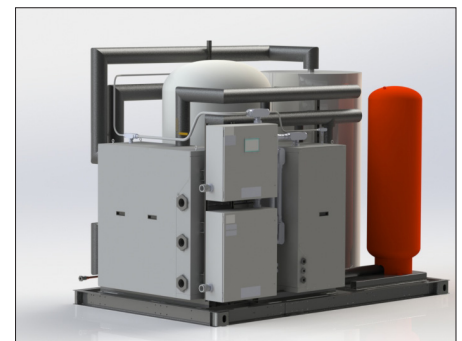
## AN INTEGRATED SOLUTION TO MINIMIZE PLANNING AND OPTIMIZE EFFICIENCY

Origin™ by Steffes is an all-electric, large volume, central heat pump, domestic water heating system specifically designed for multi-family building projects with decarbonization design goals. Steffes brings 30+ years of experience in energy storage, HVAC, and system manufacturing to provide this advanced heat pump water heating technology in an integrated solution.

Designed as a packaged system, Origin™ takes the complexity and cost out of your projects' domestic hot water system design and installation. Our team of engineers stand ready to aid in the application and engineering design support to integrate Origin™ systems into your project.

### PRODUCT & DESIGN FEATURES:

- All-electric and energy efficient
- Single source centralized unit in three different footprints to fit your facilities from 75 to 150 apartments (systems can be combined to meet larger complex needs)
- Designed for different geographies including cold climates
- Modular system design including:
  - **Heat Pump Interface Section:** contains piping connections to remote heat pump water heater(s) and isolation heat exchanger
  - **Tank Section:** contains storage tanks, swing tank, and expansion tank
  - **Building Interface Section:** contains water pumps, mixing valve, and controls panel
- Plug-and-play solution for easy installation and operation
- Competitively priced compared to distributed systems and to field-built systems
- Durably designed to last 20+ years
- Suited for new construction or retrofit projects
- Demand management ready with CTA 2045 communications protocol



## AN INTEGRATED PACKAGED SOLUTION:

Origin™ arrives on your job site ready to go. All pipes between Origin™ devices are connected and the system is ready to be filled with water. All electrical devices are factory wired and tested and the system is ready to be energized and run.

No more receiving and keeping track of multiple pieces of equipment, setting large tanks, and getting electrical wires pulled and connected to pumps and heaters. Just hook up the water lines to the building, the heat pump, and electrical power and you are ready to start delivering hot water to apartments.

- Up to 1,500 gallons of water storage
- Swing tank for off-hours temperature maintenance and system backup
- System expansion tank
- Building recirculation system with hot water return pump and system digital mixing valve
- Isolation heat exchanger to protect remotely installed heat pump(s)
- Control packages with installed sensors
- Removable panels for system access

	ORIGIN SMALL	ORIGIN MEDIUM	ORIGIN LARGE
<b>Length</b>	12'	16'	20'
<b>Width</b>	7.5'	7.5'	7.5'
<b>Height</b>	9.5'	9.5'	9.5'
<b>Dry Weight</b>	8,500 lbs.	10,500 lbs.	12,500 lbs.
<b>Wet Weight</b>	15,100 lbs.	23,500 lbs.	29,700 lbs.
<b>Voltage</b>	208VAC 3Φ w/ N		
<b>FLA</b>	107A	158A	209A
<b>MCA</b>	134A	197A	261A
<b>MOCP</b>	150A	200A	300A
<b># of Heat Pumps</b>	1-2	1-3	1-3
<b>Heat Capacity</b>	120-180 kBTU/h (35-53kW)	120-555 kBTU/h (35-163kW)	120-555 kBTU/h (35-163kW)
<b>Water Storage</b>	500 gal	750 or 1,000 gal	1,250 or 1,500 gal
<b>Backup Heat Capacity</b>	123kBTU/h (36kW)	184 kBTU/h (54kW)	246 kBTU/h (72kW)
<b>Water Output Temperature</b>	110-140°F		
<b>Water Storage Temperature</b>	140-180°F		
<b>Internal Piping Material</b>	Copper Type L		
<b>Tank Material</b>	Carbon Steel Glass Lined with 2" Insulation		
<b>Building Interface Connections</b>	2" FNPT		
<b>Heat Pump Interface Connections</b>	1" FNPT CPVC		
<b>Heat Pump Controls Conduit Hub</b>	2" FNPT RMC Zinc		
<b>Line Power Conduit Hub</b>	2" FNPT RMC Zinc		