

ELECTRIC BOILER
AND STORAGE TANK
4.5 KW TO 29 KW

altsource



THE PERFECT COMPLEMENT TO RENEWABLE ENERGY

AltSource™ is the only electric high-volume boiler on the market, and it is the perfect complement to all sources of renewable energy heat. This combination boiler-storage tank is designed for residential use and is practically maintenance-free. It serves as a back-up energy source to the primary system in order to maximize output and generate significant energy savings.



Peak-performance
heating systems

altsource

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The combination of an electric water heater and a high-volume storage tank provides you with multiple savings in terms of efficiency, space and installation costs. In order to further reduce energy consumption costs, **AltSource™** can optionally be offered with an extremely efficient copper coil heat exchanger for domestic hot water, which heats (or pre-heats) potable water to meet a family's needs.

STORE ALL THE ENERGY PRODUCED, AND EVEN MORE

When the primary renewable energy heat source is in operation, **AltSource™** stores thermal energy in its high water volume, just like a battery. This is what is called a thermal mass. When there is a low demand for heat (ex.: when there is little difference between the outdoor and indoor temperature) or when the unit is combined with a low-capacity energy source, the energy required for heating will come first from the thermal mass accumulated in the tank.

With its **T2 UltraSmart®** smart controller, **AltSource™** provides improved comfort through precise temperature control. In colder weather, the primary energy source is not always able to meet the heating demand at 100%. This is when the heating elements, controlled by the **T2 UltraSmart®** controller, provide the additional heat required from the thermal energy accumulated in the **AltSource™** tank in order to properly heat a condo or home.

Without combustion or greenhouse gas emissions, **AltSource™** is an energy-efficient alternative as well as being durable and easy to maintain.

AIR-WATER HEAT PUMP APPLICATION
Standard AltSource™ is shown



The AltSource™ thermal mass electric water heater is perfect for optimizing the performance of many types of heating systems:

- Biomass heating
- Wood boilers
- Geothermal applications
- Air-water heat pumps
- Solar energy systems



The intelligent **T2 UltraSmart®** controller modulates the power level based on the system requirements and adjusts the water temperature based on outdoor temperature.

- Accurate and easily configurable **T2 UltraSmart®** controller with backlight display
- Preset configurations based on heating distribution system
- Outdoor sensor that modulates boiler water temperature
- The **T2 UltraSmart®** controller enables users to view the boiler's operation status at a glance

AltSource™ 4.5 KW TO 29 KW

- Heating stops when outside temperature gets warmer
- “Boost” mode that automatically increases the temperature when needed
- Works only when triggered by the thermostat
- Ability to purge the pump when system is not running
- Adjustable between 50 °F and 190 °F
- Safety control to limit excessively high temperatures
- Electrical supply and heat pump contact
- 24 V electrical supply for thermostat and other accessories



STANDARD FEATURES

- 1- T2 ULTRASMART® CONTROLLER
- 2- BOILER PRESSURE RELIEF VALVE
- 3- DRAIN VALVE
- 4- HEATING WATER SUPPLY
- 5- HEATING WATER RETURN
- 6- ELECTRICAL PANEL
- 7- ELECTRIC ELEMENTS
- 8- TEMPERATURE AND PRESSURE INDICATOR
- 9- AUTOMATIC AIR VENT

FEATURES WITH OPTIONAL COPPER COIL HEAT EXCHANGER

- 10- COPPER HEAT EXCHANGER
- 11- DOMESTIC COLD WATER SUPPLY (3/4" SWEAT M)
- 12- DOMESTIC HOT WATER OUTPUT (3/4" SWEAT M)



BIOMASS OR WOOD HEAT APPLICATIONS
AltSource™ with the optional copper coil heat exchanger is shown



AltSource Available in 2 sizes

MODEL	AltSource 50	AltSource 70
VOLUME	48 US gallons	71 US gallons
WEIGHT	280 lbs.	380 lbs.
MAXIMUM OPERATING PRESSURE	30 PSI	30 PSI
CONNECTIONS	1" male NPT	1 1/4" male NPT
DIAMETER	22"	24"
HEIGHT	56 7/16"	66 5/16"

AltSource 240 VAC / 60 Hz / 1 phase¹

Power ²		Suggested electrical input ⁴					
kW	BTU/h	Amps ³	Elements	Stages	Cu Wire	Al Wire	Breaker
4,5	15354	19	1 x 4.5 kW	1	10	10	30
7,5	25590	31	1 x 3 kW + 1 x 4.5 kW	2	8	6	40
9	30708	38	2 X 4.5 kW	2	8	6	50
12	40944	50	2 X 6 kW	2	6	4	70
15	51180	63	2 x 3 kW + 2 x 4.5 kW	4	6	4	80
18	61416	75	4 x 4.5 kW	4	4	2	100
20	68240	83	4 x 5 kW	4	3	2	110
24	81888	100	4 x 6 kW	4	2	0	125
27*	92124	113	6 x 4.5 kW	6	1	00	150
29*	98948	120	4 x 5 kW + 2 x 4.5 kW	6	1	00	175

¹ Electrical supply: 120/240V or 120/208V single-phase (L1 – N – L2) with three 90°C conductors, or two conductors L1 – L2 if the boiler does not require power to a 120 VAC pump or accessories.

² Multiply by .75 for a 208 VAC power supply.

³ Multiply by .867 for a 208 VAC power supply.

⁴ The wire gauges and breaker capacity must be in conformity with the standards of the National Electrical Code (NEC), Canadian Electrical Code (CEC) and local codes (if applicable).

* Not available with the AltSource 50.

MULTI-POSITION INSTALLATION



15-YEAR WARRANTY
ON THE TANK AND THE COILS

2-YEAR WARRANTY
ON ELECTRICAL AND MECHANICAL COMPONENTS



Thermo 2000 manufactures peak-performance heating systems for domestic hot water and hydronic heating systems. Since 1978, the company's innovations have provided sustainable solutions for residential, commercial and institutional applications.

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