

# Voltex®

Hybrid Electric Heat Pump Water Heaters

# ACSmith®



# Voltex® Hybrid Electric Water Heaters

Twice as efficient as a standard electric water heater *and* easy to install, Voltex more than lives up to its impressive reputation. The consumer friendly display is simple to operate and provides easy-to-understand feedback on operational status.



## AT A GLANCE:

- Absorb environmental heat from the surrounding air and transfers it to the water, at the same time cooling and dehumidifying the ambient air
- 60 and 80-gallon tank options mean more energy created through the heat pump technology that can be stored, resulting in increased savings
- Can operate in EFFICIENCY, HYBRID ELECTRIC and VACATION modes
- User-friendly LCD Touch Pad Control with plain English text and intuitive status icons provides easy interaction
- Conserves energy with up to 2.4 Energy Factor (EF) rating
- Eligible for 30% Federal tax credit of total installation cost; additional state or utility rebates may also apply
- ENERGY STAR® qualified appliance



# Save Money On Cost Of Operation

Water heaters typically use more energy than most other household appliances. On average, they use more energy than a household's refrigerator, dishwasher, clothes washer and dryer combined. The great news is that Voltex® has been designed to dramatically decrease the cost of operation. In fact, Voltex can translate into quite significant

savings for the homeowner over the course of its lifespan. Just how significant? With up to a 2.4 Energy Factor (EF) rating (compared to an average .87-.92 EF rating of a standard electric model), these innovative water heaters can cut annual operating costs by more than half.



## Choose The Right Operating Mode Based On Climate, Demand And Installation To Maximize Savings

### Efficiency Mode

The most energy-efficient setting works by extracting warmth from the surrounding air, concentrating the heat and transferring it to the water.

### Hybrid Mode

This mode uses the heat pump for efficiency, but will use the element for quick recovery following increased hot water usage.

### Conventional Electric Mode

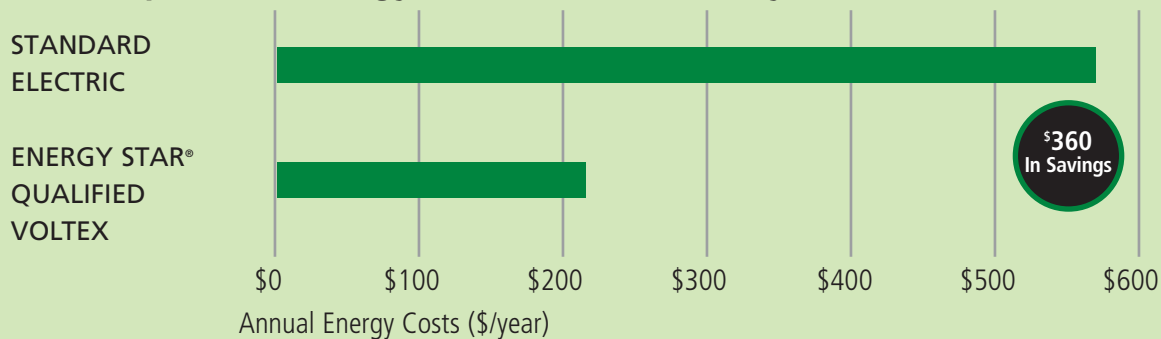
In Electric Mode, the unit operates as a conventional electric water heater, utilizing the elements only for conditions when limited ambient heat is available.

### Vacation Mode

One touch operation maintains tank temperature at 60°F (15.6°C) during vacation or extended absence to reduce operating costs and provide freeze protection.

## How Much Money Can You Save?

### Compare the energy costs with Voltex® Hybrid Electric Heat Pumps



Based on average household of 2.6 occupants. U.S. Census, 2006

Source: DOE website—[www.energystar.gov/index.cfm?c=heat\\_pump\\_savings\\_benefits](http://www.energystar.gov/index.cfm?c=heat_pump_savings_benefits)

## How Do They Work?

Voltex® Hybrid Electric Heat Pump Water Heaters are an integrated system that utilizes heat pump technology to provide a more efficient way to heat water with electricity. Voltex pulls heat from the surrounding air and deposits the heat into the tank. The end result is very efficient production of hot water, with cooler and dehumidified air as a welcome by-product.



### How They Work

In "Efficiency" mode, Voltex Hybrid Electric Heat Pump Water Heaters operate in the following manner:

- 1 A fan brings warm air through the air filter.
- 2 Heat in the air is absorbed by the refrigerant inside the evaporator coil.
- 3 The refrigerant is pumped through a compressor, which raises the temperature.
- 4 Hot refrigerant is circulated through the copper coil and transfer heat to the water.
- 5 The copper coil and storage tank are surrounded by 2 inches of "Environmentally-Friendly" Non-CFC foam insulation to reduce standby heat loss.



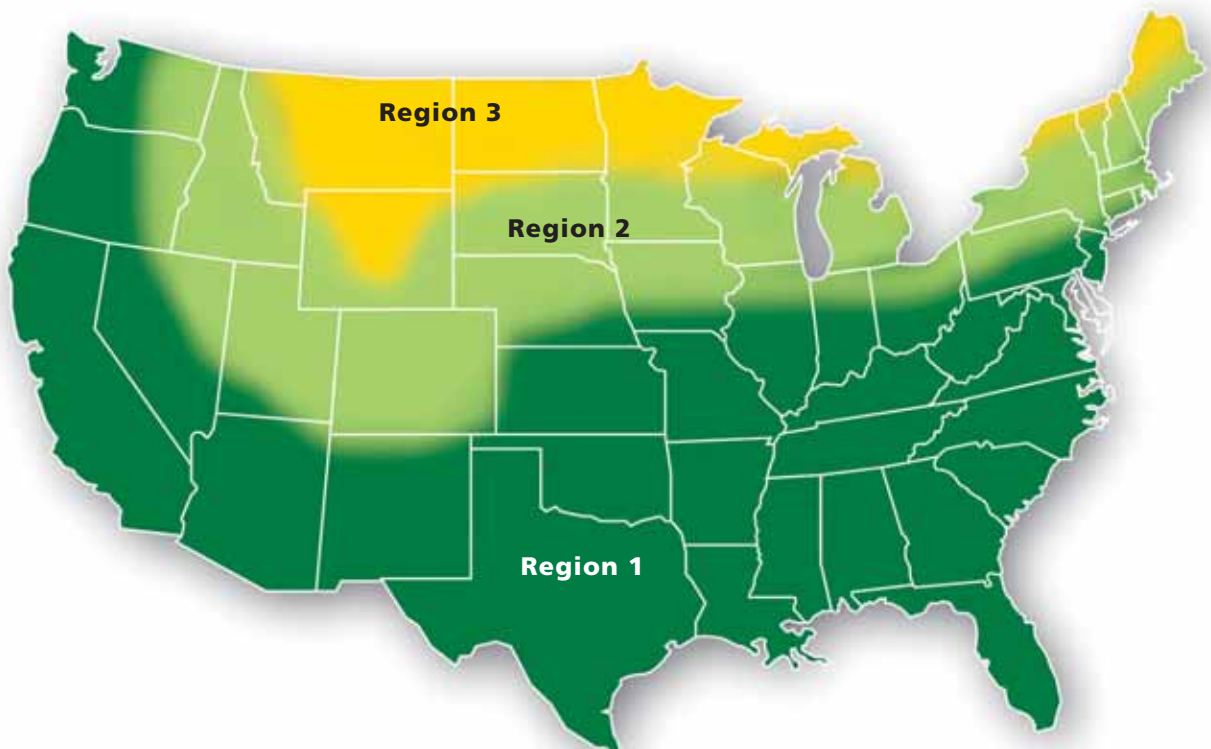
## Large Capacity Allows Use Across All Geographic Regions

Voltex Hybrid Electric Heat Pump Water Heaters can be effectively used in all areas of the U.S. Based on the location, either or both of the heating components—heat pump and traditional heating elements—will operate for optimal performance.

**Region 1:** Heat pump will be used most of the year

**Region 2:** Majority heat pump operation

**Region 3:** Combination heat pump and electric heating elements



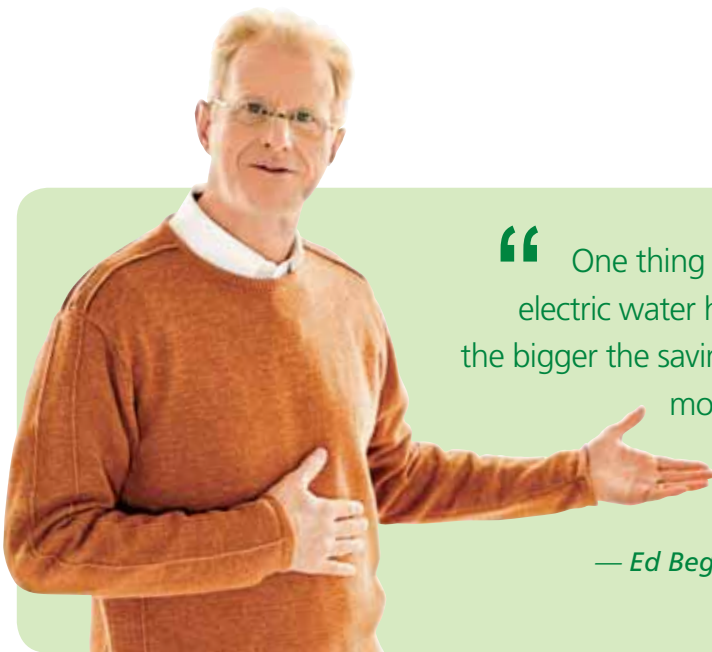
## Savings Are Greater Where Electricity Rates Are Highest

The greatest savings and quickest payback can often be in regions where the average temperatures are colder. Operating 5 months out of the year in the heat pump mode where electricity rates are two to three times higher will yield more savings than operating 10 months in the heat pump mode where electricity rates are lower.

## Voltex® Hybrid Electric Heat Pump Water Heaters

Model Number	Gallon Capacity	Energy Factor by Mode			First Hour Rating by Mode			Dimensions (Inches)		Approximate Shipping Weight (lbs)
		Efficiency*	Hybrid	Electric	Efficiency	Hybrid	Electric	Height	Diameter	
PHPT-60	60	2.40	2.33	0.88	51	68	66	67½	24½	332
PHPT-80	80	2.30	2.33	0.85	70	84	76	81½	24½	410

\*Up to a 2.4 Energy Factor (EF) in Efficiency mode.



“ One thing you need to know about hybrid electric water heaters: the bigger the storage tank, the bigger the savings. And Voltex offers an 80-gallon model, the biggest available. So you can imagine the savings. ”

— Ed Begley, Jr., Actor and Environmentalist



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