

ENERGY STAR Qualified Heat Pump Water Heaters

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Below are currently qualified ENERGY STAR models available for sale in the U.S.

Product Brand	Model	Volume (gallons)	Tank Height (inches)	Tank Diameter (inches)	Input kW	Volts	Energy Factor (EF)	kWh/year	First Hour Rating (gallons per hour)	Min Warranty - Tank (years)	Min Warranty-Parts (years)	Active	Active Date	Date Qualified
AirGenerate	AT11266	66			4.5	240	2.2	1950	60	6	6	Yes	10/7/2009	10/7/2009
AirGenerate	AT166	66			5	220	2.4	1830	75	10	10	Yes		12/16/2010
Airmax	MH4WH	50	53	17.7	1.15	220	1.0	1999	50	6	2	Yes	5/15/2012	5/31/2012
American	HPE10260H045DV	60			4.5	240	2.3	1885	68	10	10	Yes	8/10/2010	8/10/2010
American	HPE10280H045DV	80			4.5	240	2.3	1885	84	10	10	Yes	3/25/2010	3/5/2010
A.O. Smith	PHPT-60	60			4.5	240	2.3	1885	68	10	10	Yes	8/10/2010	8/10/2010
A.O. Smith	PHPT-80	80			4.5	240	2.3	1885	84	10	10	Yes	3/25/2010	3/5/2010
Bosch	HP 200-1 E AI-F	50	64.5	22.5	4.5	240	2.2	1996	58	10	10	Yes	6/1/2011	5/25/2011
Bosch	HP 200-1 E AI-F S3100	50					2.2				10	Yes	10/3/2011	1/18/2011
Eco-Hybrid	WH50GM	50					2.2				6	Yes	5/15/2011	4/29/2011
GE	GEH50DEED**	50	59.5	22.3	4.5	240	2.4		65	10	10	Yes	3/14/2012	1/17/2012
GE	GEH50DNSR***	50	60.5	21.8	4.5	240	2.4	1856	63	10	10	Yes	8/24/2009	8/24/2009
GE	GEH50DXSR***	50	60.5	21.8	4.5	240	2.4	1856	63	10	10	Yes	8/24/2009	8/24/2009
HTP	HPW-50-6	50					2.2				6	Yes	5/15/2011	4/29/2011
Kenmore	153.32116	60			4.5	240	2.3	1885	68	12	12	Yes	8/10/2010	8/10/2010
Kenmore	153.32118	80			4.5	240	2.3	1885	84	12	12	Yes	8/3/2010	8/3/2010
Midea	RSJ-15/190RDN3-C	50					2.2				10	Yes	5/20/2011	4/15/2011
Reliance	10 60 DHPT	60			4.5	240	2.3	1885	68	10	10	Yes	8/10/2010	8/10/2010
Reliance	10 80 DHPT	80			4.5	240	2.3	1885	84	10	10	Yes	3/25/2010	3/5/2010
Rheem	HP40RH	40			4	240	2.0	2195	56	10	10	Yes	9/17/2010	9/17/2010
Rheem	HP50RH	50	75.5	21	4	240	2.0	2195	67	10	10	Yes	9/3/2009	9/3/2009
Rheem EcoSense	HP40RUES	40			4	240	2.0	2195	56	10	10	Yes	9/17/2010	9/17/2010
Rheem EcoSense	HP50ES	50	75.5	21	4	240	2.0	2195	67	10	10	Yes	9/3/2009	9/3/2009
Richmond	HP40RM	40			4	240	2.0	2195	56	10	10	Yes	9/17/2010	9/17/2010
Richmond	HP50RM	50	75.5	21	4	240	2.0	2195	67	10	10	Yes	9/3/2009	9/3/2009
Ruud	HP40RU	40			4	240	2.0	2195	56	10	10	Yes	9/17/2010	9/17/2010
Ruud	HP50RU	50	75.5	21	4	240	2.0	2195	67	10	10	Yes	9/3/2009	9/3/2009
State	EPX 60 DHPT	60			4.5	240	2.3	1885	68	10	10	Yes	8/10/2010	8/10/2010
State	EPX 80 DHPT	80			4.5	240	2.3	1885	84	10	10	Yes	3/25/2010	3/5/2010
Stiebel Eltron	ACCELERA 300	80			2.2	240	2.5	1739	78	10	10	Yes	9/8/2009	9/8/2009
USCraftmaster	HPE2K60HD045V	60			4.5	240	2.3	1885	68	10	10	Yes	8/10/2010	8/10/2010
USCraftmaster	HPE2K80HD045V (USC)	80			4.5	240	2.3	1885	84	10	10	Yes	3/25/2010	3/5/2010
USI Green Energy	Green Star WH1350	50			5	220	2.4	1837	60	10	10	Yes		4/15/2011
USI Green Energy	Green Star WH1360	65			5	220	2.4	1830	75	10	10	Yes	1/6/2010	1/6/2010
Whirlpool	HPE2K60HD045V	60			4.5	240	2.3	1885	68	10	10	Yes	8/10/2010	8/10/2010
Whirlpool	HPE2K80HD045V (WP)	80			4.5	240	2.3	1885	84	10	10	Yes	3/25/2010	3/5/2010

Residential Water Heaters Key Product Criteria

ENERGY STAR Residential Water Heaters — Eligible Product Types	
High-Efficiency Gas Storage	A nominal input of 75,000 BTU/hour or less and a rated storage volume from 20 to 100 gallons.
Gas Condensing	
Heat Pump Water Heaters	A maximum current rating of 24 amperes, voltage no greater than 250 volts, and a transfer of thermal energy from one temperature to a higher temperature level for the purpose of heating water. Unit must have "integrated" or "drop-in" configuration.
Whole-Home Gas Tankless	A nominal input of over 50,000 BTU/hour up to 200,000 BTU/hour and a rated storage volume of 2 gallons or less.
Solar Water Heaters	OG-300 rating from the SRCC. Auxiliary tank must be residential-class.

ENERGY STAR Criteria

A water heater model must meet all of the identified criteria to be labeled as ENERGY STAR.

High-Efficiency Gas Storage				
ENERGY STAR Criteria	Energy Factor	First-Hour Rating	Warranty	Safety
Gas Storage (Ending 8/31/2010)	EF >= 0.62	FHR >= 67 gallons per hour	Warranty >= 6 years on sealed system	ANSI Z21.10.1/CSA 4.1
Gas Storage (Beginning 9/1/2010)	EF >= 0.67	FHR >= 67 gallons per hour	Warranty >= 6 years on sealed system	ANSI Z21.10.1/CSA 4.1
Gas Condensing				
ENERGY STAR Criteria	Energy Factor	First-Hour Rating	Warranty	Safety
Gas Condensing	EF >= 0.8	FHR >= 67 gallons per hour	Warranty >= 8 years on sealed system	ANSI Z21.10.1/CSA 4.1
Heat Pump Water Heaters				
ENERGY STAR Criteria	Energy Factor	First-Hour Rating	Warranty	Safety
Heat Pump Water Heaters	EF >= 2.0	FHR >= 50 gallons per hour	Warranty >= 6 years on sealed system	UL 174 & UL 1995
Whole-Home Gas Tankless				
ENERGY STAR Criteria	Energy Factor	Gallons-Per-Minute	Warranty	Safety
Whole-Home Gas Tankless	EF >= 0.82	GPM >= 2.5 over a 77°F rise	Warranty >= 10 years on heat exchanger and 5 years on parts	ANSI Z21.10.3/CSA 4.3
Solar Water Heaters				
ENERGY STAR Criteria	Solar Fraction	Warranty		Safety
Solar Water Heaters	SF >= 0.5	or, 6 years on storage tank, 2 years on c		OG-300 Certification from the SRCC

Glossary

Energy Factor (EF):

Energy Factor is the ratio of useful energy output from the water heater to the total amount of energy delivered to the water heater. The higher the EF is, the more efficient the water heater.

Solar Fraction (SF):

Solar Fraction is the portion of the total conventional hot water heating load (delivered energy and tank standby losses) provided by solar energy. The higher the SF is, the more efficient the solar water heater.

First-Hour Rating (FHR):

First-Hour Rating is the amount of hot water in gallons a storage water heater can supply per hour (starting with a tank full of hot water).

Gallons per Minute (GPM):

Gallons per Minute is the amount of hot water in gallons a tankless water heater can supply per minute over a 77°F temperature rise.

Temperature Rise:

The difference between the temperature of the hot water exiting the heater and the cold water entering the heater. If you want a shower of 110°F and you live in south Florida with groundwater at 70°F, then that is a 40°F temperature rise (110-70=40).

Definitions for Column Headers - Heat Pump

Brand and Model

This is how a particular water heater is identified. Manufacturers identify products they produce using the brand and model number. Some products may also be identified with a name or SKU, which is different from the brand or model number. You should always be able to find the brand and model number on a product.

Model numbers sometimes contain wildcard characters, such as *, #, and X, that are placeholders for non-energy attributes, such as color.

Volume

Volume is the capacity of the tank, in gallons.

Tank Height (inches)

Tank height is the distance from the bottom of the water heater's tank to the top of its tank.

Tank Diameter (inches)

Tank diameter is the width or diameter of the water heater's tank.

Input kW

Input kW refers to the input wattage of the heat pump or supplementary electric elements.

Volts

Volts refer to the potential of an outlet or circuit to provide electrical energy. The standard current in the typical U.S. home is in the range of 110 to 120 volts. However, circuits used for equipment, such as heat pump water heaters, may use voltage in the range of 220 to 240 volts. These heavy-duty circuits can be identified by their non-standard outlet plugs.

Energy Factor (EF)

Energy Factor is the ratio of useful energy output from the water heater to the total amount of energy delivered to the water heater. EF is a metric used to compare relative efficiencies of water heaters. The higher the EF is, the more efficient the water heater. EF is determined by the DOE test procedure, Code of Federal Regulations, Title 10, Section 430.

kWh/year

kWh/year refers to the amount of electricity consumed by the water heater according to its Energy Factor determined by the DOE test procedure, Code of Federal Regulations, Title 10, Section 430.

First Hour Rating (gallons per hour)

First-Hour Rating is the amount of hot water (in gallons) a storage water heater can supply per hour (starting with a tank full of hot water).

Min Warranty – Heat Exchanger (years) and Min Warranty - Parts (years)

Warranty is an assurance by the manufacturing partner that the purchased equipment (heat exchanger) and components (parts) are warranted for a certain required period-of-time, depending on the technology. Minimum warranty is the shortest warranty you can receive on the qualified water heater model.

Active

Models can be discontinued by manufacturers, but still be available in stores. Discontinued models will appear on this list for a year after their last production date to allow retailers to clear inventory. These models are still ENERGY STAR qualified, but they are no longer manufactured. Sponsors, such as utilities, may honor incentives for discontinued models at their discretion.