



Residential Electric Energy Smart®

WARRANTY	MODEL NUMBER	GALLON CAPACITY	RECOVERY 90° RISE	E.F.	JACKET DIAMETER A	HEIGHT TOP OF HEATER B	APPROX. SHIPPING WEIGHT	FAMILY SIZE
9-YEAR	EE2H40RD045V	40	20.7	0.92	20	48-1/4	99	3-4
	EE2H40HD045V	40	20.7	0.92	18	59	102	3-4
	EE2H50RD045V	50	20.7	0.92	22	48	121	5+
	EE2H50HD045V	50	20.7	0.92	20	58-1/4	115	5+
	EE2H80HD045V	80	20.7	0.90	24	59	191	5+
12-YEAR	EE2J40RD045V	40	20.7	0.92	20	48-1/4	99	3-4
	EE2J40HD045V	40	20.7	0.92	18	59	102	3-4
	EE2J50RD045V	50	20.7	0.92	22	48	121	5+
	EE2J50HD045V	50	20.7	0.92	20	58-1/4	115	5+
	EE2J65HD045V	66	20.7	0.90	22	59-1/4	152	5+
	EE2J80HD045V	80	20.7	0.90	24	59	191	5+

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement. Dimensions on all charts shown in inches. Inlet and outlet are on 8" centers.

Specification

Residential electric water heater(s) shall be a self-cleaning Energy Smart model _____ or an approved equal, and shall have a _____-year tank warranty and a _____-year parts warranty, when installed in a residential application. Heater(s) shall have a storage capacity of _____ gallons and shall have a rated input of _____ KW at 240 Volts, single phase, 60 cycle AC, and shall be designed, tested and listed in accordance with Underwriter's Laboratories standard UL 174. Heaters shall meet or exceed the requirements of the Federal "National Appliance Energy Conservation Act of 2004" and shall comply with ASHRAE Standard 90.1-1999. The interior of the storage tank shall be lined with a Fused Ceramic Shield lining, fused to the tank at 1600°F, forming a corrosion-resistant lining; polymer linings are not acceptable. Each tank shall be furnished with an internal anode for cathodic protection. The unit must be equipped with an external top-located electrical junction box. Electrical heating elements shall be screw-in, direct immersion, resistance type. Element operation shall be controlled by an electronic thermostat. Should an element fail, the control shall automatically utilize the remaining element for heating water and signal which element has failed. The unit shall be equipped with control logic that shuts down all electricity to the heating elements in the event of no water or low water levels in the tank. The water heater shall have a self-diagnostic control that monitors and indicates power on, no power or control failure, start-up failure, high-limit operation, sensor failure, defective upper element, or defective lower element. The control must be pre-programmed with four operating modes; Smart, Energy Smart, Low Temperature, and Vacation/Cabin. Temperature shall be measured using thermistor sensing technology. The Smart setting shall operate the water heater to the temperature selected by the temperature control knob. The Energy Smart setting shall monitor element usage and adjust the tank temperature to control knob temperature or lower in order to utilize the lowest feasible tank temperature for usage pattern detected. The Low Temperature setting shall automatically set the water temperature to a maximum of 115°F regardless of the temperature setting selected by the temperature control knob. The Vacation/Cabin mode shall set the water temperature to approximately 50°F to resist freezing. A high temperature cutoff shall be supplied as an integral part of the heater. Element access panels shall be provided on the front of the heater for each element. The tank shall be totally encased in a metal jacket and insulated with non-CFC foam to reduce standby heat loss.

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*Note that Self-Cleaning does not mean maintenance free. For recommended maintenance procedures, please refer to the "Installation Instructions and Use & Care Guide" provided with your water heater.

Order Entry and Sales

P.O. Box 4056, 500 Princeton Road
Johnson City, TN 37602-4056
(800) 937-1037
(800) 581-7224 fax

Product Service and Support

P.O. Box 1597, 500 Princeton Road
Johnson City, TN 37605-1597
(800) 999-9515
(800) 999-5210 fax

Distributed By

ENERGY SMART® SELF-DIAGNOSTIC CONTROL SYSTEM

The First Effective Self-Cleaning Residential Electric Water Heater Designed to Automatically Adjust to Homeowner's Needs – Reducing Off-Cycle Energy Costs by as Much as 30% When Operating in the Energy Smart Mode*

SELF-CLEANING* ELECTRIC WATER HEATER

- **Self-Diagnostic Control System**
Conserves energy, automatically adjusting to homeowner's water usage patterns. Automatically monitors 8 critical functions and indicates their status using flash code sequences.
- **Four User-Selectable Operating Modes**
 - Smart
 - Energy Smart
 - Low Temperature
 - Vacation/Cabin
- **Electronic Control**
Microprocessor control constantly monitors heating cycles, ensuring sufficient hot water at a minimum cost, saving as much as 30% in standby heat loss when operating in the Energy Smart mode.
- **Thermistor Temperature Sensing**
Ensures accurate temperature control. Standard water heater elements are used, making replacement easy.
- **Patented Dry-Fire Protection**
Automatically shuts heater down if not completely filled with water prior to turning on the electricity.
- **LimeFighter® Dip Tube**
Reduces sediment and lime buildup.
- **Dual Heating Elements**
Dual 4500 Watt/240 Volt elements are standard on all models (maximum 5.5 KW 240 Volt). "EE2J-" models have dual stainless steel heating elements. "EE2H-" models have a stainless steel lower element and a copper upper element.
- **Side-Mounted T&P Valve**
Conveniently located on the side of the tank to facilitate piping to a drain or external to the building.
- **3/4" Top Water Connections**
- **Non-CFC Foam Insulation**
Twice the standard insulation to reduce standby heat loss.
- **Code Approvals**
Listed to UL 174, NAECA 2004, BOCA and ASHRAE 90.1-1999.



9- or 12-Year Limited Tank Warranty
Heavy gauge steel is automatically formed, rolled and welded to assure continuous seams for Fused Ceramic Shield lining. Each tank is triple tested to ensure quality.

9- or 12-Year Parts Warranty
Original factory parts warranted for 9 or 12 years.

For complete warranty information consult the written warranty of American Water Heater Company at www.americanwaterheater.com/support or call (800) 999-9515.

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SELF-CLEANING* ELECTRIC WATER HEATER

The Smartest Choice™ in Electric Water Heaters



SELF-DIAGNOSTIC ENERGY SMART® MODE

Energy Smart's microprocessor constantly monitors heating cycles, ensuring sufficient hot water at a minimum cost, saving as much as 30% in standby heat loss when operating in the Energy Smart mode.



USER-SELECTABLE OPERATING MODES

• SMART

The control allows the water heater to function similar to conventional electric water heaters. The temperature setting is selected by the user.

• ENERGY SMART

Heating cycles are monitored and automatically modified to provide the lowest water temperature that will satisfy the user's water usage patterns. This setting ensures sufficient hot water availability at minimum cost. If the user changes the mode and later returns to Energy Smart, the control will remember the optimum temperature range, and automatically operate in the optimum range.

• LOW TEMPERATURE

The control automatically limits the maximum water temperature to 115°F. This mode assures compliance with codes that limit water temperature to 120°F or less.

• VACATION/CABIN

Water temperature is automatically adjusted to 50°F to prevent freezing. Since the temperature control dial is not adjusted, upon returning the user resets the mode back to its original setting (1, 2, or 3) and the water temperature returns to the user's original selection.

SELF-DIAGNOSTIC FUNCTION MONITOR

Functions Monitored	Indicated Conditions
Power-on	Establishes that the electricity is on and control is functioning correctly
Power-off	Verifies availability of incoming power
High Water Temperature	Alerts that a high temperature condition has occurred and shuts down heater
Temperature Sensor Operation	Identifies faulty temperature sensor and safely shuts down heater
Upper Element Operation	Identifies that upper element has failed and automatically switches power to the lower element
Lower Element Operation	Identifies that lower element has failed and automatically switches power to the upper element
No Water On Start-up (Dry-Fire Condition)	Shuts down the heater in the event power is turned on before the heater has been filled with water
Control Board Operation	Identifies control board status

THERMISTOR TEMPERATURE SENSOR

Thermistor temperature sensing ensures accurate temperature control. Standard water heater elements are used, making replacement easy.

