

## Accelera® E Heat Pump Water Heaters

**Engineer/Architect:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Job Name/Customer:** \_\_\_\_\_ **Phone:** \_\_\_\_\_

**Location:** \_\_\_\_\_ **Date Required:** \_\_\_\_\_

**Contractor:** \_\_\_\_\_ **Phone:** \_\_\_\_\_

### Description

The Accelera® E extracts 80 percent of the heat it needs to make hot water from the energy in ambient air. The heat pump draws only 650 watts and every watt it uses generates 3–5 watts of hot water. In warm climates, the unit can be placed in a garage, where it uses the heat from the outside air; or inside the house, where it helps with air conditioning. In cooler climates, it is typically placed in a basement where it also dehumidifies the basement.

- › Made in the E.U.
- › Accelera E qualifies for federal, state, local, and utility financial incentives that may be available for heat pump water heaters
- › Single, specially-designed 1500-watt back-up element can be disabled
- › Only wrap-around aluminum condenser on the market means no possible contamination of potable water
- › Superior insulation guarantees ultra-low standby losses
- › Impressed current anode never needs replacing
- › The higher the ambient air temperature where the unit is located, the greater the efficiency will be
- › Heat pump requires sufficient air in order to work and should not be installed in a closed space smaller than 10 ft. x 10 ft. x 8 ft.
- › Water heater height is approximately 75 in. tall and additional is needed for servicing
- › Heat pump will dehumidify the space where it is installed and cool it down approximately 2–6 °F (1–3 °C)
- › Moisture removed from the air by the heat pump requires a condensate drain
- › Make sure the floor will support 1000 lbs., the weight of a water-filled unit
- › Do not install in a location where air temperature regularly drops below 42 °F (6 °C) or above 108 °F (42 °C)
- › Heat pump water heaters make noise roughly equivalent to a freezer while in operation and should not be installed where this would be a problem



## Specifications

General Data	Accelera® 220 E	Accelera® 300 E
Item no.	233058	233059
Operating temperature range	42 °F to 108 °F (6 °C to 42 °C)	
DHW temperature	149 °F (65 °C)	
Air flow rate	324 CFM	
Sound power level*	60 dB	
Sound pressure level* @ 3.3 feet (1 m)	52 dB(a)	
Capacity	58 gal (220 l)	79.8 gal (302 l)
Refrigerant / filling weight	R134a / 850 g	R134a / 900 g
Height	60 <sup>7</sup> / <sub>8</sub> " (1545 mm)	75 <sup>1</sup> / <sub>4</sub> " (1913 mm)
Diameter	27 <sup>1</sup> / <sub>8</sub> " (690 mm)	
Height of unit when tilted incl. packing	74 <sup>1</sup> / <sub>8</sub> " (1895 mm)	87 <sup>3</sup> / <sub>4</sub> " (2230 mm)
Weight dry	264.5 lb (120 kg)	297.6 lb (135 kg)
Weight wet	748.5 lb (339.5 kg)	956.6 lb (433.9 kg)
Water connection	1" male NPT	
Condensate connection	3/4" male NPT to 1/2" barbed elbow	
Safety condenser	Wraps around outside	
Operating pressure, water side	87 psi (600 kPa)	
High pressure cutoff, refrigerant side	348.1 psi (2.4 MPa)	
<b>Electrical Data &amp; Performance</b>		
Voltage / Frequency	220-240 V / 60 Hz	
Circuit breaker	15 A	
Rated current compressor & fan	2.7 A	
Rated power consumption compressor and fan <sup>2</sup>	650 W	
Rated power, booster heater	1500 W	
Heating output, heat pump <sup>3</sup>	approx. 1700 W	
Uniform Energy Factor (UEF)	3.115	3.609
DOE est. yearly energy usage / cost	1040 kWh	1289 kWh
DOE est. yearly energy cost	\$169	\$155
First hour rating	50.3 gal (190.4 l)	74.2 gal (280.8 l)



Certified to ANSI/UL Std. 174 & 1995  
Conforms to CAN/CSA C22.2  
No. 110-94 & 236-05



Tested and certified  
by WQA against NSF/  
ANSI 372 for lead free  
compliance.

\* Sound Power Level measures the sound energy emitted by a source. Sound Pressure Level (SPL) measures the sound level (loudness) at a distance from the source. SPL varies depending on the acoustic environment and the accuracy of the measurement device.

<sup>1</sup> T<sub>amb</sub> = 107.6 °F (42 °C) T<sub>water</sub> = 149 °F (65 °C) / 240 V

<sup>2</sup> Test point to DIN 8497 at 59 °F (15 °C) air temperature, 70% rel. humidity and 113 °F (45 °C) water temperature.

<sup>3</sup> Test point at 59 °F (15 °C) air temperature, 70% rel. humidity, heating up water from 59 °F (15 °C) to 149 °F (65 °C), according to EN 255 T3, 240 V / 60 Hz

## Warranty Excerpt

**Residential & commercial warranty:** Stiebel Eltron warrants to the original owner that the Accelera® heat pump water heater will be free from defects in workmanship and materials for a period of ten (10) years from date of purchase for single family residential installations and one (1) year from date of purchase for all other installations. Should the part(s) prove to be defective under normal use during this period, Stiebel Eltron, Inc. will be responsible for replacement of the defective part(s) only. Stiebel Eltron, Inc. is not responsible for labor charges to remove and/or replace the defective part(s), or any incidental or consequential expenses. Should the owner wish to return the heat pump water heater for repair, the owner must first secure written authorization from Stiebel Eltron, Inc. the owner shall be required to show proof of purchase date, and to pay all transportation costs to return the defective part(s) or heat pump water heater for repair or replacement. Warranty is void if water heater has been installed or used improperly or if design has been altered in any way.