

Accelera® 300 Heat Pump Water Heater

Engineer/Architect: _____ **Date:** _____

Job Name/Customer: _____ **Phone:** _____

Location: _____ **Date Required:** _____

Contractor: _____ **Phone:** _____

Description

The Accelera® 300 extracts 80 percent of the heat it needs to make hot water from the energy in ambient air. Heat pump draws only 500 watts and every watt it uses generates 3-5 watts of hot water. The 80-gal. tank is more efficient than competing 50-gal. tanks. 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 Germany
- › Accelera® 300 qualifies for federal, state, local, and utility financial incentives that may be available for heat pump water heaters
- › 80 gal. (300 l) tank is designed so 50 gal. of hot water can be drawn before the back-up element is needed
- › Single, specially-designed 1700-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
- › Anode rod is replaceable
- › 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 1 foot minimum 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

Item no.	222423
Operating temperature range	42°F to 108°F / 6°C to 42°C
DHW temperature	140°F / 60°C
Air flow rate	324 CFM
Sound pressure level @ 1.1 yards / 1 m	55.2 dB(a)
Sound power level	64.2 dB
Capacity	80.044 gal / 303 l
Refrigerant / filling weight	R134a / 900 g
Height	73 13/16" / 187.4 cm
Diameter	26" / 66 cm
Height of unit when tilted incl. packing	90" / 228.6 cm
Weight dry	286.6 lb / 130 kg
Weight wet	952.4 lb / 432 kg
Water connection	Union to 3/4" NPT
Condensate connection	3/4"
Safety condenser	Wraps around outside
Operating pressure, water side	87 psi / 0.6 MPa
Permissible positive pressure, refrigerant side	348.1 psi / 2.4 MPa

Electrical Data

Voltage / Frequency	220-240 v / 50/60 Hz
Maximum power draw ¹	2200 w
Circuit breaker	15 A
Rated current compressor & fan	2.5 A
Rated power consumption compressor and fan ²	500 w
Rated power, booster heater	1700 w
Heating output, heat pump ³	approx. 1700 w
COP (t) ³	3.18
Typical COP range	3-6
ENERGY STAR energy factor	2.73
DOE est. yearly energy usage / cost	1391 kWh / \$167.00
First hour rating	78.6 gal / 297.5 l



Intertek

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

**ISO 9001
CERTIFIED**



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.

¹ T_{amb} = 107.6° F / 42°C T_{water} = 140° F / 60°C / 240 V

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

³ Test point at 59°F / 15°C air temperature, 70% rel. humidity, heating up water from 59°F / 15°C to 140° / 60°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[®] 300 heat pump water heater will be free from defects in workmanship and materials for a period of ten (10) years from the date of purchase. 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.