

Accelera® 300 Heat Pump Water Heater**Applications****Commercial > Industrial > Institutional**

- › Office buildings
- › Stores
- › Malls
- › Warehouses
- › Restaurants
- › Gas stations
- › Schools
- › Hotels/Motels
- › Commercial condominiums
- › Manufacturing facilities

Residential

- › Homes
- › Condos
- › Apartments
- › Cabins/cottages

Technical 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
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



* 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

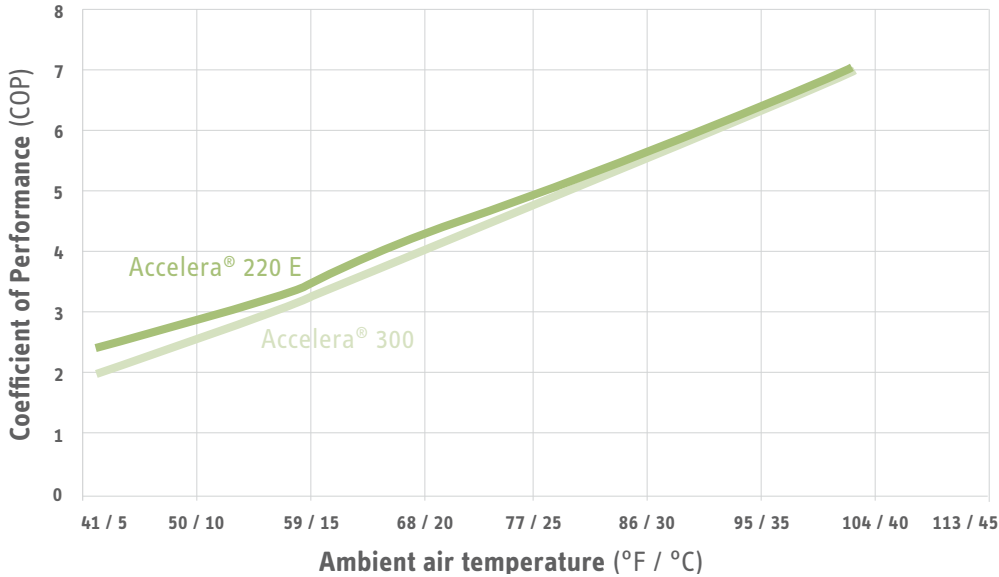
² Test point to DIN 8497 at 59°F / 15°C air temperature, 70% rel. humidity and 113°F / 45°C water temperature.

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)

Features

Accelera® 220 E & 300 Efficiency Rate

COP measured according to EN 255.3 as function of ambient air temperature at 70% relative humidity based on 59°F / 15°C cold water temperature



- › 80 gallon storage capacity
- › Reduces hot water costs by up to 80%
- › Cools & dehumidifies the air around it
- › Removable sacrificial anode
- › Reliable German technology & manufacturing
- › Low stand-by loss due to good insulation
- › 10-year warranty



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.



Specification

The water heater shall be Accelera® 300 air-to-water heat pump manufactured by Stiebel Eltron in Germany with a 10-year warranty. Water heater shall have 3 adjustable rubber feet for leveling unit that shall also provide sound/vibration isolation. Tank shall be 80 gal. with interior of hygienic glass enamelled surface and a top to bottom sacrificial anode. Heat pump thermal capacity shall be 1.7 kW and cooling capacity 0.9 kW, with thermal losses less than 1.27 KWh/24h at 45 K temp. difference. Tank insulation shall be 2" polyurethane foam insulation. There shall be a single electric resistance element of 1.7 kW. Heat pump shall be fitted with a safety pressure switch at 22.4 bar (324 PSI). Operation temperature limit shall be 107.6°F to 42.8°F. Unit shall be equipped with automatic defrost via fan-driven ambient air and shall have a fast pressure equalization to prevent cycling compressor after power outage. Housing shall be hot dip power painted galvanized sheet metal without welding and have salt air impervious screws. Refrigerant circuit shall have corrosion protection via a stainless steel expansion valve and a coated evaporator salt mist tested to ASTM B 287-74/G84-95 200 hrs. Compressor shall be a high efficiency reliable rotary compressor with thermal overload switch. Refrigerant circuit shall be stainless steel parts and silver alloy brazed copper tubing with recuperator tubing. Water connections shall be NPT.

Engineer/Architect _____	Date _____
Job Name/Customer _____	Location _____
Contractor _____	Representative _____
Qty _____	
Accelera model _____	