

ACCELERA® 300 HEAT PUMP WATER HEATER SUBMITTAL SHEET

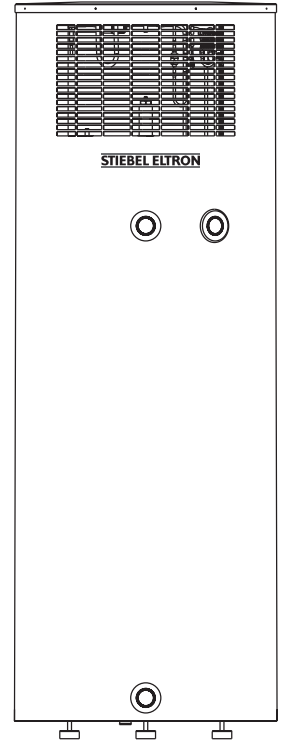
STIEBEL ELTRON

Simply the Best

80 GALLON 208-240 V AIR SOURCE HEAT PUMP WATER HEATER FOR RESIDENTIAL AND COMMERCIAL APPLICATIONS.

Specifications

| Model | Accelera® 300 Heat Pump Water Heater | |
|--|--|---------------------------|
| General Data | | |
| Part no. | | 222423 |
| Operating temperature range | °F / °C | 42 to 108 / 6 to 42 |
| DHW temperature | °F / °C | 140 / 60 |
| Air flow rate | CFM | 324 |
| Sound level @ 1.1 yards / 1 m | dB(A) | 64.2 |
| Capacity | Gal / l | 80.044 / 303 |
| Refrigerant filling weight | -- / g | R 134a / 900 |
| Height | in / cm | 73.8 / 187.4 |
| Diameter | in / cm | 26 / 66 |
| Height of unit when tilted (max 45°) including packing | in / cm | 90 / 228.6 |
| Weight dry | lb / kg | 286.6 / 130 |
| Weight wet | lb / kg | 952.4 / 432 |
| Water connection | in | R3/4" NPT |
| Condensate connection | in | 3/4" |
| Condenser | Safety heat exchanger (tank wrap-around condenser) | |
| Operating pressure, water side | Psi / MPa | 87 / 0.6 |
| Permiss. positive pressure, refrigerant side | Psi / MPa | 348.1 / 2.4 |
| Electrical Data | | |
| Voltage / Frequency | V / Hz | Single Phase 240/208 / 60 |
| Maximum power draw | kW | 2.2 |
| Circuit breaker | A | 15 |
| Rated current compressor & fan | A | 2.5 |
| Rated power consumption compressor & fan ²⁾ | kW | 0.5 |
| Rated power, booster heater | kW | 1.7 |
| Heating output, heat pump ³⁾ | kW | approximately 1.7 |
| COP (t) ³⁾ | | 3.18 |
| Typical COP range | | 3-6 |
| Energy factor according to ENERGY STAR | | 2.508 |
| First hour rating | Gal / l | 78.6 / 297.5 |



¹⁾ Tamb = 107.6 °F / 42 °C Twater = 140 °F / 60 °C / 240 V ²⁾ Test point to DIN 8947 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 °F / 60 °C (according to EN 255 T3, 240 V / 60 Hz)

Description

The beauty of heat pump water heating technology is that the amount of electrical energy needed to create hot water is greatly reduced compared to a conventional electric tank type water heater. The Accelera's compressor and fan consume only 1 kWh of electricity to generate the heat equivalent of 3 – 5 kWh. The efficiency of the unit goes up with increasing ambient air temperatures. This ground breaking efficiency redefines what a water heater is capable of.

In a warm climate, the unit can either be placed in the garage where it takes heat from the ambient air, or inside the house, where it helps with the air conditioning load. In a cooler climate, the unit is typically placed in the basement where it also acts as a dehumidifier. You get hot water at a discount and a dry basement as well.

If the heat pump that is built into the unit alone cannot keep up with the hot water demand then an electric backup element with 1.7 kW loading will automatically activate.

- REDUCES HOT WATER COSTS BY UP TO 80%
- COOLS AND DEHUMIDIFIES THE AIR AROUND IT
- LOW STAND-BY LOSSES THROUGH GOOD INSULATION
- 80 GALLON STORAGE CAPACITY
- 10 YEAR WARRANTY
- 2.5 ENERGY FACTOR



**ISO 9001
CERTIFIED**

