



Product Specification

930091-0001Rev A

HPW2

Water Source Heat Pump
For Water Heating



General - Colmac HPW water source heat pumps offer commercial and industrial users of potable hot water, an energy efficient means of heating water to temperatures as high as 160°F. The HPW uses waste heat in the form of any filtered, non-corrosive, pressurized stream of liquid at temperatures as low as 50°F.

Building hydronic loop water, return chilled water, condenser or cooling tower water, geothermal loops or wells, and industrial process water are a few of the possible heat sources that can be utilized by the HPW heat pump.

Depending on the temperature of the waste heat source, the HPW can produce potable hot water for as little as 1/4 the energy used by a conventional boiler or electric resistance heater.

These packaged water-source water heating pumps are factory wired, charged, and tested. Low operating noise levels, high capacity, high efficiency, and environmentally safe refrigerants are integrated into this new design. They come in two separate sizes for installation location convenience.

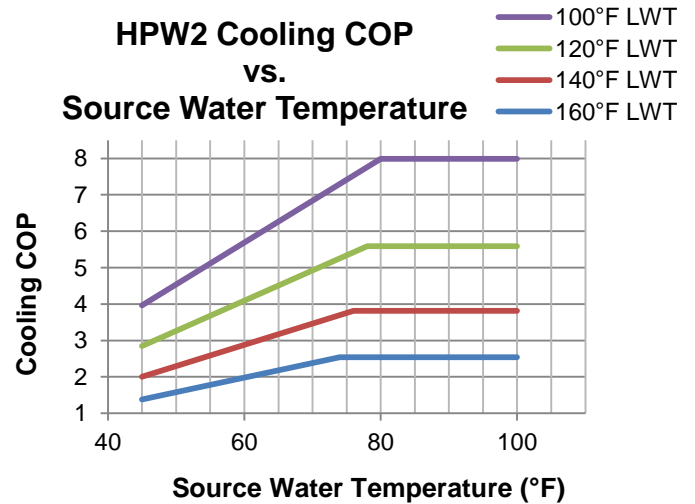
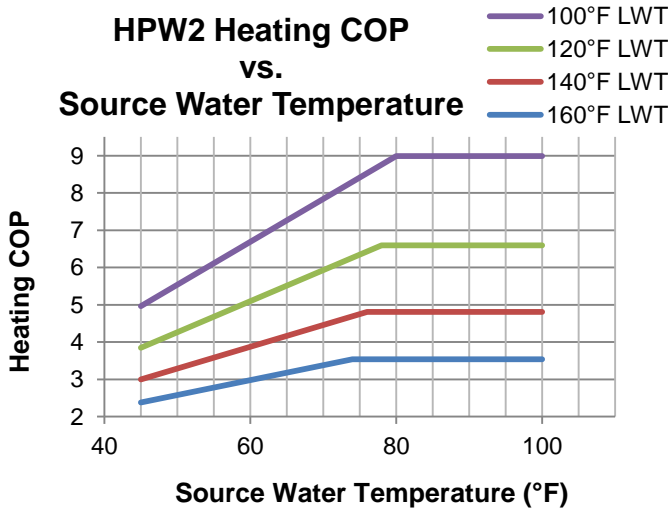
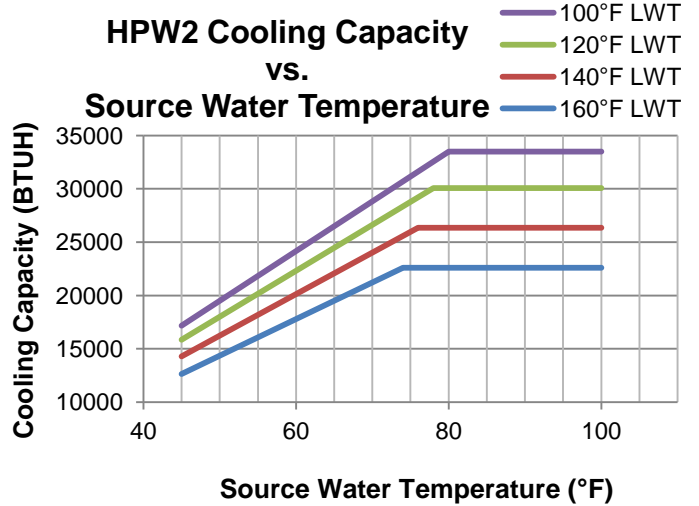
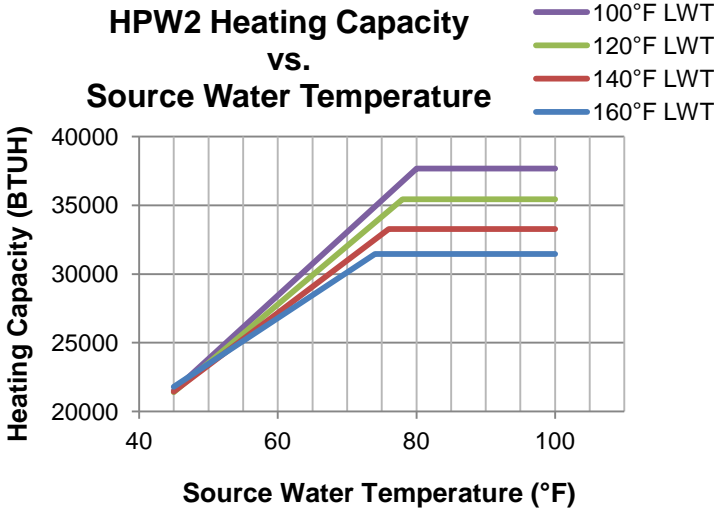
General Specifications:

- Water Heating Capacity *: 30,772 BTUH
- Cooling Capacity *: 23,812 BTUH
- Source Water Flow Rate *: 5 GPM
- Heating COP *: 4.42
- Cooling COP *: 3.42

* 70°F Potable Water Inlet, 140°F Potable Water Outlet, 70°F Source Water

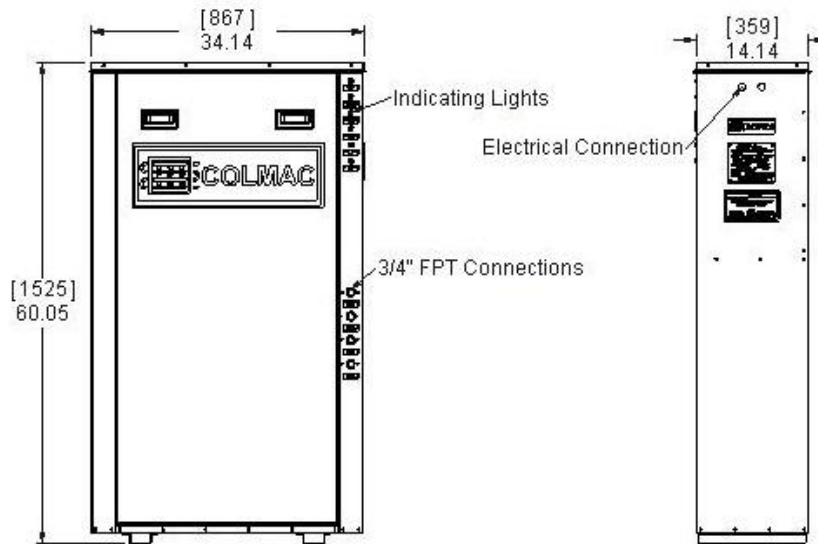
Standard Features:

- Environmentally friendly R134a refrigerant.
 - Copeland scroll compressors.
 - Vented, double wall, stainless steel, brazed plate condensers (potable water).
 - Single wall, stainless steel, brazed plate evaporators (source water).
 - Adjustable TXV, moisture indicating sight glass, liquid line filter drier.
 - Bronze hot water circulating pump (potable water).
 - Electronic temperature control valve (e-TCV™).
 - Source water flow switch and freeze stat.
 - Automatic controls include high and low pressure cutouts, compressor time delay relay, normal run and fault indicating lights.
 - Cabinets are offered in mill finish aluminum, galvanized steel, 304 SST, and 316 SST.
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Note: Based on entering potable water temperature of 70°F.
 Source water pump not included in calculations.
 Based on 5 GPM source water flow rate.

Unit Dimensions

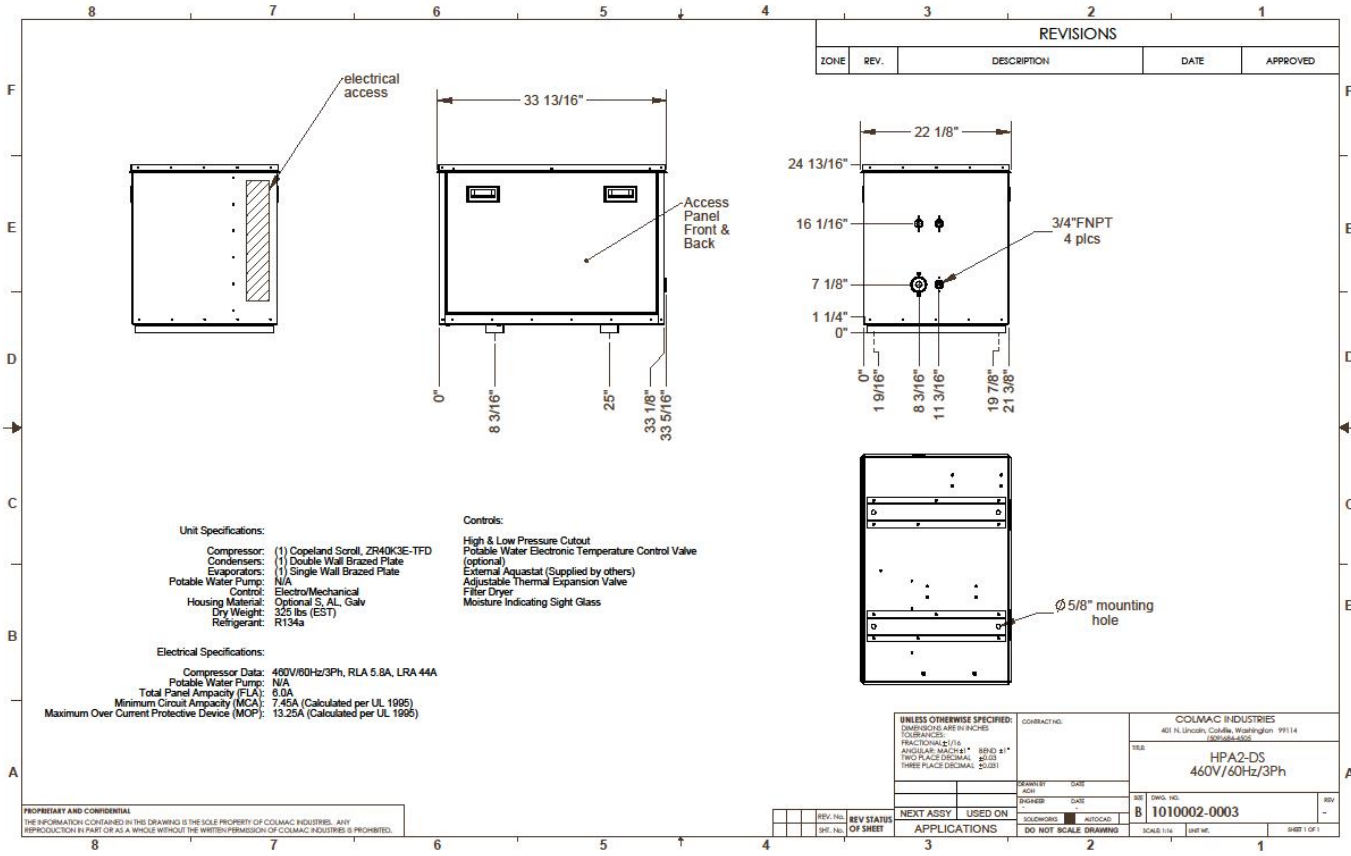


Unit Weight

Dry Weight:	250 Lbs.
Crated Weight:	275 Lbs.
Crated Cube:	16.8 cu. ft.

Electrical Data

Line Voltage	Rated Load Amps (RLA)	Locked Rotor Amps (LRA)
208-230/60/1	15 A	71 A
208-230/60/3	10 A	62 A
460/60/3	5 A	31 A



- Unit Specifications:**
- Compressor: (1) Copeland Soroll, ZR40K3E-TFD
 - Condensers: (1) Double Wall Brazed Plate
 - Evaporators: (1) Single Wall Brazed Plate
 - Potable Water Pump: N/A
 - Control: Electro/Mechanical
 - Housing Material: Optional S, AL, Galv
 - Dry Weight: 325 lbs (EST)
 - Refrigerant: R134a
- Electrical Specifications:**
- Compressor Data: 460V/60Hz/3Ph, RLA 5.8A, LRA 44A
 - Potable Water Pump: N/A
 - Total Panel Ampacity (FLA): 8.0A
 - Minimum Circuit Ampacity (MCA): 7.45A (Calculated per UL 1995)
 - Maximum Over Current Protective Device (MOP): 13.25A (Calculated per UL 1995)
- Controls:**
- High & Low Pressure Cutout
 - Potable Water Electronic Temperature Control Valve (optional)
 - External Aquastat (Supplied by others)
 - Adjustable Thermal Expansion Valve
 - Filter Dryer
 - Moisture Indicating Sight Glass

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS FRACTIONAL 2/16 ANGULAR MIN/4 RND 1/16 TWO PLACE DECIMAL THREE PLACE DECIMAL 0.003		CONTRACT NO.	COLUMAC INDUSTRIES 401 N. Lincoln, Colville, Washington 99114 (509)884-4552
DESIGNED BY ADH	DATE	TITLE	HPA2-DS 460V/60Hz/3Ph
ENGINEER	DATE	REV	B
NEXT ASSY USED ON APPLICATIONS		DRWG. NO.	B 1010002-0003
DO NOT SCALE DRAWING		SCALE	1/8" = 1"
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