



Product Specification

930091-0004 Rev A

HPW8M (60 Hz)

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.

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 1/6 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.

General Specifications:

- Water Heating Capacity *: 123.7 MBH
- Cooling Capacity *: 101.1 MBH
- Source Water Flow Rate *: 20.0 GPM
- Heating COP *: 5.7
- Cooling COP *: 4.8

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

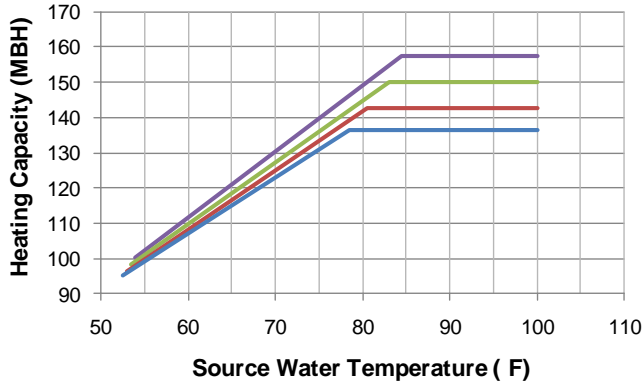
Standard Features:

- 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 pumps (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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Performance Data

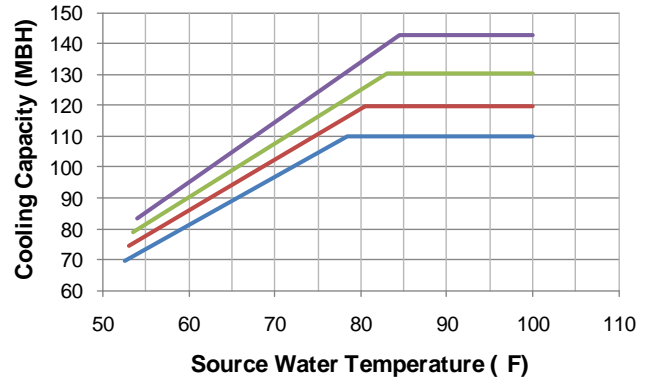
HPW8M Heating Capacity vs. Source Water Temperature

- 100 F LWT
- 120 F LWT
- 140 F LWT
- 160 F LWT



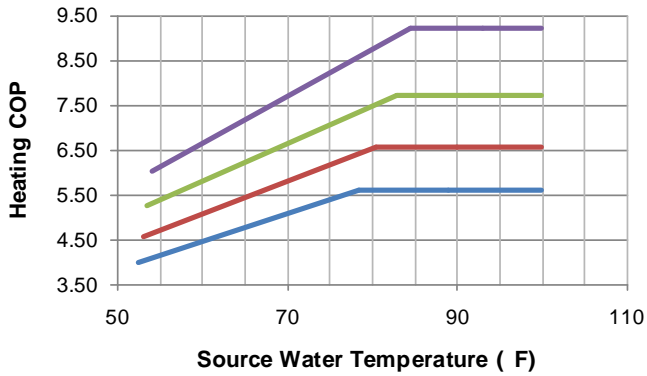
HPW8M Cooling Capacity vs. Source Water Temperature

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- 120 F LWT
- 140 F LWT
- 160 F LWT



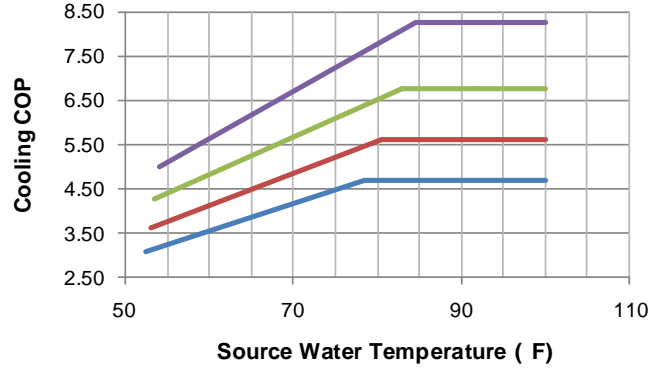
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HPW8M Cooling COP vs. Source Water Temperature

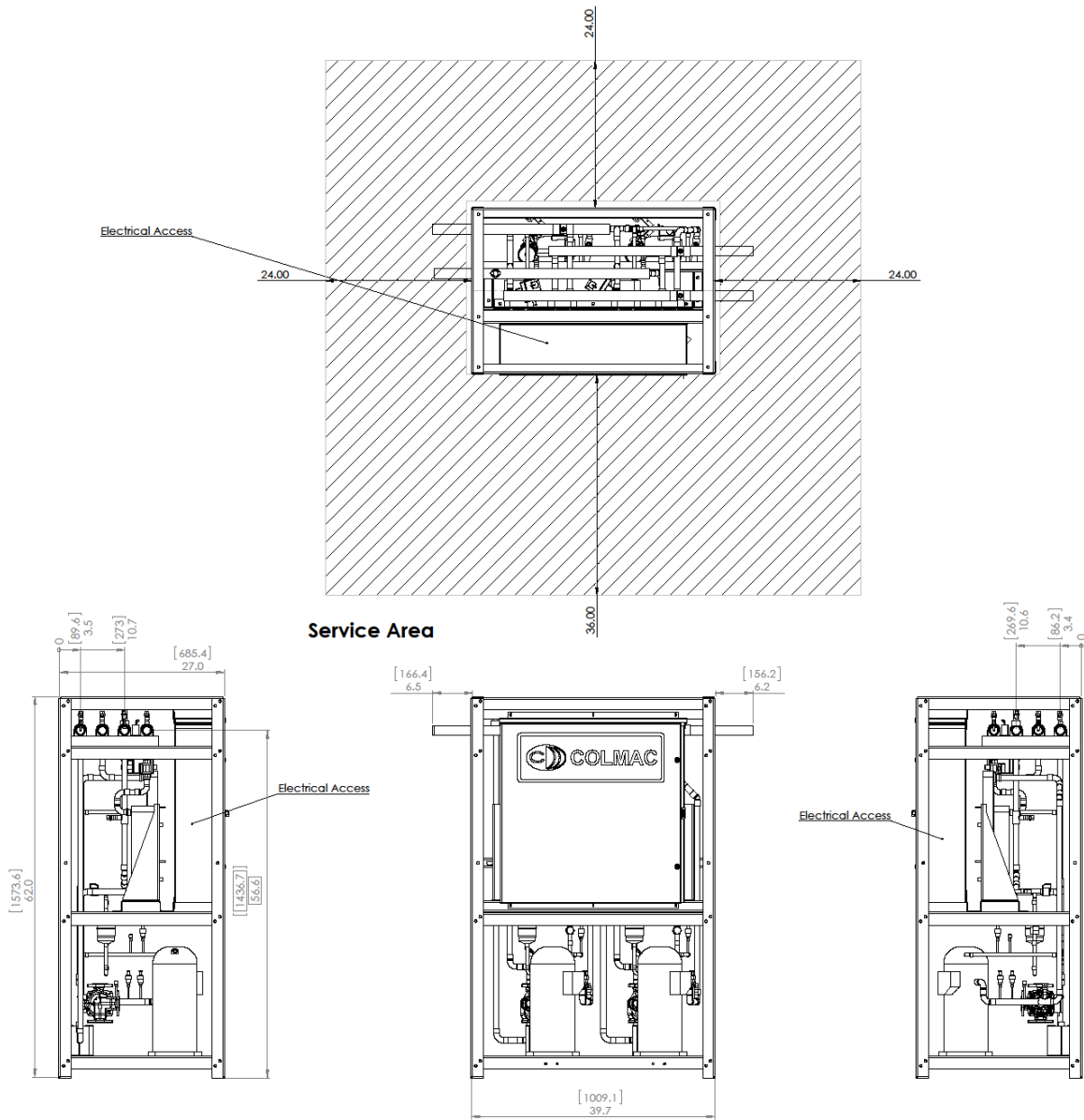
- 100 F LWT
- 120 F LWT
- 140 F LWT
- 160 F LWT



Note: Based on entering potable water temperature of 70°F.
 Source water pump not included in calculations.
 Based on 20 GPM source water flow rate.

Unit Dimensions

Unit Weight



Dry Weight: 500 Lbs.
 Crated Weight: 575 Lbs.

Electrical Data

Line Voltage	Rated Load Amps (RLA)	Locked Rotor Amps (LRA)
208-230/60/1	25.0 A	144 A
208-230/60/3	19.9 A	128 A
460/60/3	11.1 A	63 A

(Per compressor module, 2 modules total)