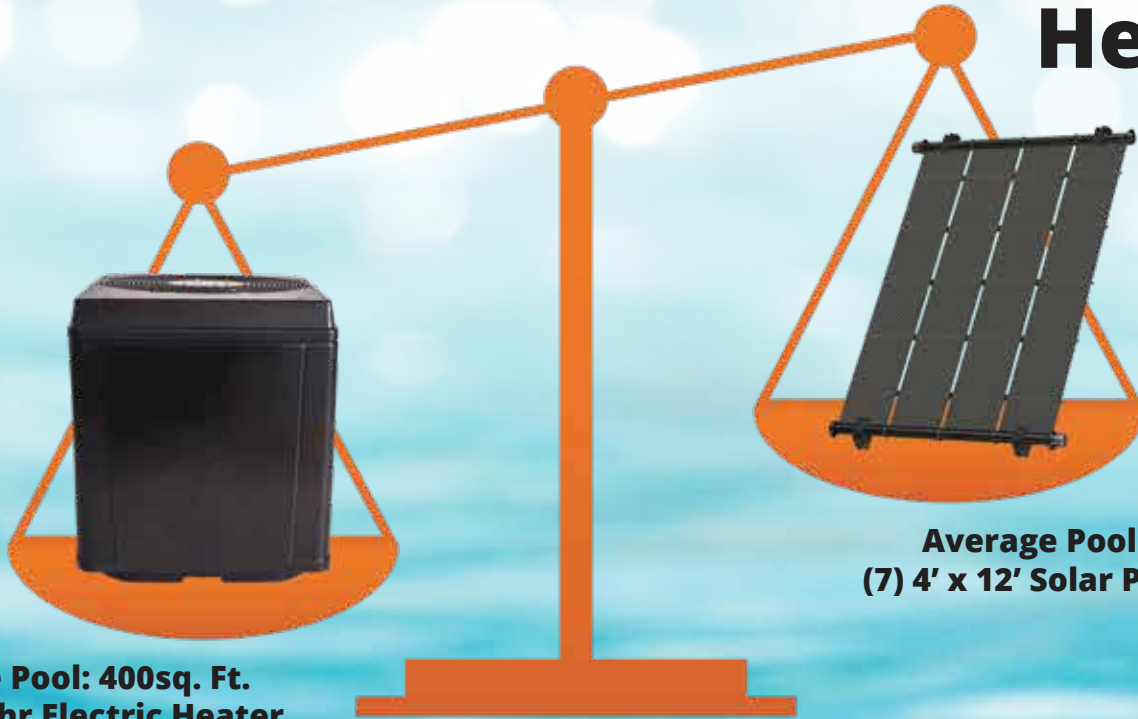


Heat Pump VS. Solar Pool Heating



**Average Pool: 400sq. Ft.
125 kBTU/hr Electric Heater**

**Average Pool: 400sq. Ft.
(7) 4' x 12' Solar Pool Collectors**

	Electric Heat Pump Costs	Solar Heating Savings
Average Unit Cost including installation	\$4,800.00	\$6,500.00
Electrical Connection Costs (30A-40A GFCI)	\$1,000-\$3,000	\$0.00 No Electrical Connection Required
Average Annual Energy Consumption (\$0.12/kWh)	6,000kWh/\$720.00	\$720 Annual Savings
Warranty	2 Year Full 5 Year Parts	7-12 Years
Average Life Span	5-7 Years	25 Years
Estimated Annual Carbon Imprint	5,520 lbs of Carbon PRODUCED	5,520 lbs of Carbon SAVED

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12 Year Warranty on Solar Pool V.S 12 Year Cost of Electric Heat Pump

*Based on 2,500 sqft Home in 2012

*Average bill does not account for cost of Pool Heating

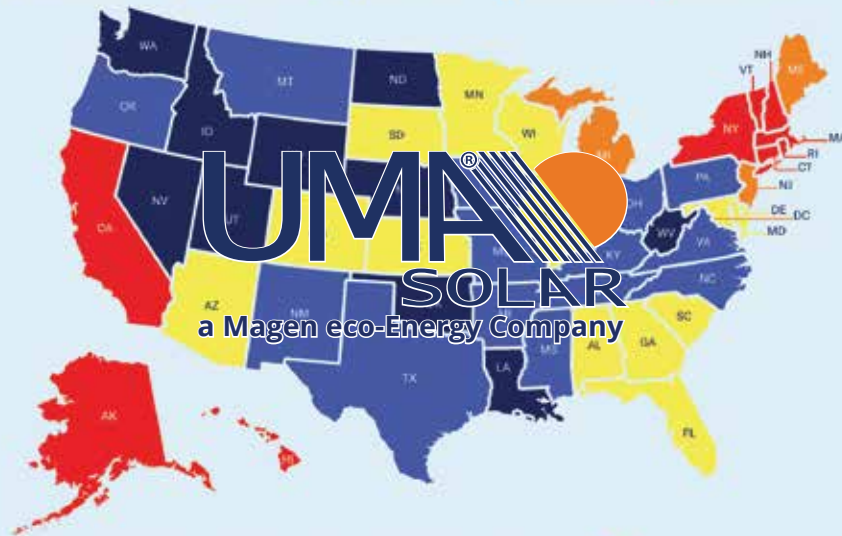
Heat pumps will use around 5,000 watts or 5 kilowatts per hour per 100,000 BTU's.
For a typical size 100,000 BTU heat pump, that's 5 kilowatts per hour / 300sq. ft. Pool

Electrical Rates	Average Monthly Bill	Add Heat Pump	Monthly Bill with Heated Pool	Average Annual Bill	Add Heat Pump	Annual Bill with Heated Pool
\$0.09 / kWh	\$ 92.07	\$ 81.00	\$ 173.07	\$ 1,104.39	\$ 486.00	\$ 1,590.39
\$0.10 / kWh	\$ 102.30	\$ 90.00	\$ 192.30	\$ 1,227.10	\$ 540.00	\$ 1,767.10
\$0.12 / kWh	\$ 122.76	\$ 99.00	\$ 221.76	\$ 1,472.52	\$ 648.00	\$ 2,120.52
\$0.14 / kWh	\$ 143.22	\$ 126.00	\$ 269.22	\$ 1,717.94	\$ 756.00	\$ 2,473.94
\$0.18 / kWh	\$ 184.14	\$ 162.00	\$ 346.14	\$ 2,208.78	\$ 972.00	\$ 3,180.78
\$0.20 / kWh	\$ 204.60	\$ 180.00	\$ 384.60	\$ 2,454.20	\$ 1,080.00	\$ 3,534.20
\$0.24 / kWh	\$ 245.52	\$ 216.00	\$ 461.52	\$ 2,945.04	\$ 1,296.00	\$ 4,241.04
\$0.28 / kWh	\$ 286.44	\$ 252.00	\$ 538.44	\$ 3,435.88	\$ 1,512.00	\$ 4,947.88
\$0.30 / kWh	\$ 306.90	\$ 270.00	\$ 576.90	\$ 3,681.30	\$ 1,620.00	\$ 5,301.30

2021 Average U.S. Electricity Retail Prices (cents per kWh)

The national average is 11.18 cents per kilowatt hour.

● 8.00 to 9.00 ● 9.01 to 10.00 ● 10.01 to 12.00 ● 12.01 to 15.00 ● 15.01 and Higher



Source: U.S. Energy Information Administration;
Electric Power Monthly: February 2022



Estimated Pool Heating Calculation for this Diagram:
6 Hours per Day (30kWh/Day = 900kWh/Month)
6 Months per Year (5,400kWh/Annual)

Electrical Rates	12 Year Solar Heating Savings
\$0.09 / kWh	\$ 5,832.00
\$0.10 / kWh	\$ 6,480.00
\$0.12 / kWh	\$ 7,776.00
\$0.14 / kWh	\$ 9,072.00
\$0.18 / kWh	\$ 11,664.00
\$0.20 / kWh	\$ 12,960.00
\$0.24 / kWh	\$ 15,552.00
\$0.28 / kWh	\$ 18,144.00
\$0.30 / kWh	\$ 19,440.00



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