



A Regal Beloit Company

## imPulse™

Energy Calculations  
For release on or after April 7, 2008

### Motor installations:

California has an estimated 1,633,741 portable hot tubs, according to P.K. Data, Inc<sup>1</sup>.

### Operating time:

The purpose of the circulation pump is to keep a continual amount of water circulating and filtering all day to prevent stagnation and to improve water clarity. A typical circulation pump operates, on average, 22-24 hours per day.

### Savings:

When the imPulse motor is used as the circulation pump motor, it consumes, on average, 100 fewer watts (.100 kW). This is in comparison to a standard induction circulation pump motor providing the same flow rate. Combining hot tub installations and operating time, overall yearly energy consumption savings can be calculated.

**22 hours x 365 days x 1,633,741 hot tubs x .100 kW = 1,311,894,023 kWh savings per year**

According to the CEC<sup>2</sup>, California's power plants generate an average of 68.92 MW. Therefore, the number of power plants that can be saved annually can be calculated.

**24 hours x 365 days x 68.92 MW / plant = 603,739,200 kWh annual generation per plant**

**1,311,894,023 savings ÷ 603,739,200 = 2.17 plants saved per year**

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<sup>1</sup> Data from 2007 U.S. Hot Tub Market report P.K. Data, Inc. <http://www.pkdata.com/PKData/>

<sup>2</sup> California Power Plants Database <http://www.energy.ca.gov/database/index.html#powerplants>