

How much does it cost to run your Coffee Machine?

You will first need to calculate your annual Kilowatt-hour (kWh) consumption. Then use that result to calculate your Annual Cost. The formulas for this are as follows:

$$\frac{\text{Equipment Wattage}}{1,000} \times \text{Hours in Use per day} \times \text{Days in Use per Year} = \text{Annual Kilowatt-hour Consumption}$$

$$\text{Annual Kilowatt-Hour consumption} / 1,000 \times \text{the Cost per Hour (located on your power bill)} = \text{Annual Cost}$$

Traditional Brewer

Assumptions

- 1,450 Watt tank element
- No warmer elements
- Cost per kWh is 8.5 cents
- Brewer is Connected 24 Hours per Day
- 10 Brews per Day at 6 Minutes per Brew
- 2 Cycles per Hour = 48 Cycles per Day

1. 10 Brews per Day that take 6 minutes each = 60 minutes of "Brew Time".
2. 2 Cycles per Hour are needed just to keep the water in the tank within temperature range for brewing. This takes approximately 5 minutes per cycle which = 10 minutes of *each* hour "Idle Time".
3. 2 cycles in each 24 hour day is 48 Cycles per Day. Subtract the 10 actual Brews per Day = 38 actual "Idle Cycles". (2 x 24 - 10 = 38).
4. You end up with 190 Minutes of "Idle Time" per Day. (38 x 5 = 190)
5. 60 minutes of "Brew Time" + 190 minutes of "Idle Time" = 250 minutes of time the machine is actually consuming power.
6. 250 minutes divided by 60 min (1 hour) = 4.17 kWh per day of Energy Consumption.
7. 1,450 Watts x 4.17 kWh x 365 days / 1,000 = 2,206.97 kWh per year of Energy Consumption.
8. 2,206.97 kWh per year x 8.5 cents per kWh =

\$187.59 per year

Energy Saver Brewer EST/ESA

Assumptions

- 1,450 Watt Heat Pump
- No "Idle Time"
- Cost per kWh is 8.5 cents
- Brewer is Connected 24 Hours per Day
- 10 Brews per Day at 8 Minutes per Brew

1. 10 Brews per Day that take 8 minutes each = 80 minutes of "Brew Time".
2. 80 minutes divided by 60 minutes (1 hour) = 1.33 kWh per Day.
3. 1,450 watts x 1.33 kWh x 365 days / 1,000 = 703.90 kWh per Year.
4. 703.90 kWh x 8.5 cents per kWh =



\$59.82 per year