

Small Motor Efficiency Rules EFFECTIVE March 2015



On Feb 28, 2010 the DOE has also mandated efficiencies of General Purpose Small motors. This regulation went into effect 2015. Covered motors are defined as:

- 1/4 to 3HP General Purpose
- ODP
- 3-phase, and single phase CSCR and CSIR
- 2 Digit Frames 42, 48, 56 and IEC equivalent
- 2,4,&6 Pole
- Continuous Duty

Exclusions from the Small Motor Rule:

- Definite or Special Purpose Motors (Examples: Air Over, Thrust or Sleeve Bearing, Submersible, Immersible, Component Sets, Partials (3/4), Integral and Non-Integral Brake, Liquid Cooled, Inverter-Only, Encapsulated, Double Shafts, close coupled pump, 56J
- Non-Standard Mounting
- Multi-speed motors
- Enclosed motors



DOE Average Full-load Efficiency levels for Small Electric Motors - Open Drip Proof						
	Polyphase			Capacitor-start Single Phase		
Motor Output	6-Pole	4-Pole	2-Pole	6-Pole	4-Pole	2-Pole
0.25 HP or 0.18 KW	67.5	69.5	65.6	62.2	68.5	66.6
0.33 HP or 0.25 KW	71.4	73.4	69.5	66.6	72.4	70.5
0.5 HP or 0.37 KW	75.3	78.2	73.4	76.2	76.2	72.4
0.75 HP or 0.55 KW	81.7	81.1	76.8	80.2	81.8	76.2
1 HP or 0.75 KW	82.5	83.5	77.0	81.1	82.6	80.4
1.5 HP or 1.1 KW	83.8	86.5	84.0	N/A	83.8	81.5
2 HP or 1.5 KW	N/A	86.5	85.5	N/A	84.5	82.9
3 HP or 2.2 KW	N/A	86.9	85.5	N/A	N/A	84.1