

Easy Upgrades Motors/Controls Worksheet



Effective January 5, 2009. Please complete this worksheet for your retrofit of motors and motor controls. To qualify, the project must meet the applicable specifications stated on the back of this worksheet. Your total incentive for each measure will be the quantity multiplied by the per unit incentive ($Q \times I = TI$). When completed, attach this worksheet to your application form.

		Easy Upgrades Application #		EZ _____	
Installing	Replacing	Quantity (Units)	Incentive (Per Unit)	Total Incentive	
NEMA Premium Efficiency™ Motors					
M1	1 hp Motor, min 85.5% efficiency	Same or larger hp standard motor	_____ motor	\$20.00	\$ _____
M2	1.5 hp Motor, min 86.5% efficiency	Same or larger hp standard motor	_____ motor	\$25.00	\$ _____
M3	2 hp Motor, min 86.5% efficiency	Same or larger hp standard motor	_____ motor	\$30.00	\$ _____
M4	3 hp Motor, min 89.5% efficiency	Same or larger hp standard motor	_____ motor	\$35.00	\$ _____
M5	5 hp Motor, min 89.5% efficiency	Same or larger hp standard motor	_____ motor	\$40.00	\$ _____
M6	7.5 hp Motor, min 91.7% efficiency	Same or larger hp standard motor	_____ motor	\$55.00	\$ _____
M7	10 hp Motor, min 91.7% efficiency	Same or larger hp standard motor	_____ motor	\$70.00	\$ _____
M8	15 hp Motor, min 93.0% efficiency	Same or larger hp standard motor	_____ motor	\$90.00	\$ _____
M9	20 hp Motor, min 93.0% efficiency	Same or larger hp standard motor	_____ motor	\$110.00	\$ _____
M10	25 hp Motor, min 93.6% efficiency	Same or larger hp standard motor	_____ motor	\$130.00	\$ _____
M11	30 hp Motor, min 94.1% efficiency	Same or larger hp standard motor	_____ motor	\$150.00	\$ _____
M12	40 hp Motor, min 94.1% efficiency	Same or larger hp standard motor	_____ motor	\$180.00	\$ _____
M13	50 hp Motor, min 94.5% efficiency	Same or larger hp standard motor	_____ motor	\$220.00	\$ _____
M14	60 hp Motor, min 95.0% efficiency	Same or larger hp standard motor	_____ motor	\$280.00	\$ _____
M15	75 hp Motor, min 95.4% efficiency	Same or larger hp standard motor	_____ motor	\$350.00	\$ _____
M16	100 hp Motor, min 95.4% efficiency	Same or larger hp standard motor	_____ motor	\$420.00	\$ _____
M17	125 hp Motor, min 95.4% efficiency	Same or larger hp standard motor	_____ motor	\$550.00	\$ _____
M18	150 hp Motor, min 95.8% efficiency	Same or larger hp standard motor	_____ motor	\$650.00	\$ _____
M19	200 hp Motor, min 96.2% efficiency	Same or larger hp standard motor	_____ motor	\$750.00	\$ _____
Downsizing Bonus					
M20	For downsizing motors during retrofit	10–200 hp existing motor	_____ Δ hp	\$3.00	\$ _____
ECM Motors					
M21	ECM Motor	Standard induction motor	_____ motor	\$30.00	\$ _____
Variable Speed Controls					
M22	Variable Speed Drives	Standard motor, 5–200 hp	_____ hp	\$60.00	\$ _____

Motors/Controls Total \$

Specifications for Motors/Control Measures

Effective January 5, 2009

NEMA Premium™ Efficiency Motors

NEMA Premium™ efficiency ratings are nominal full-load ratings. Any 1,800 rpm Open Drip Proof (ODP) or Totally Enclosed Fan Cooled (TEFC) motor that meets or exceeds the stated efficiencies may be eligible for an incentive.

The minimum efficiency levels stated on this worksheet may not be the minimum specifications that qualify. For 1,200 or 3,600 rpm motors, refer to the NEMA Premium™ efficiency rating tables for minimum qualifying performance (www.nema.org). Motors larger than 200 horsepower (hp) may be eligible under the Custom Efficiency program.

Motors must have a minimum expected run time of 2,000 hours per year to qualify. If the prior motor was oversized, the downsizing bonus (below) could also apply.

Manufacturer's specification sheets for the new motors must accompany the final application.

Downsizing Bonus

This incentive applies to the replacement of oversized motors. Where motor loading analysis shows a smaller sized motor is a better match, this bonus can be applied on top of the incentive for a NEMA Premium™ Motor.

The bonus is based on the reduction in hp from the prior motor to the new motor with the maximum incentive payment limited to the old motor size in hp. For example, a 15 hp motor being replaced by a 10 hp motor cannot earn more than \$15.

Supporting documentation that shows the prior oversizing must accompany the final application.

ECM Motors

This incentive applies to any Electronically Commutated Motor (ECM), brushless direct current motor, when replacing a conventional induction motor.

ECMs can power fans in forced-air furnaces, heat-recovery ventilators, commercial refrigeration, and other small fans.

Motors must have a minimum expected run time of 2000 hours per year to qualify.

Manufacturer's specification sheets for the ECM motors must accompany the final application.

Variable Speed Drives

Variable speed drives (VSDs) for non-HVAC system motor control can qualify for this incentive. Motors must be between 5 and 200 horsepower, operating at least 2,000 hours per year and variably-loaded.

Incentives are based on the motor horsepower that each VSD controls. An analysis that shows the motor's loading profile and manufacturer's specification sheet for the VSDs must accompany the final application.

VSDs must be installed in accordance with the Institute for Electrical and Electronics Engineers (IEEE) Standard 519. Any throttling devices or other similar control devices used prior must be removed or permanently disabled when the VSD is installed to qualify for an incentive.

Note: VSDs for HVAC applications may also qualify for an incentive. Please refer to the HVAC/Controls Worksheet for details and use it to apply.