



MOTOR AND VARIABLE FREQUENCY DRIVE PRODUCTS

This Equipment Catalog describes the eligibility requirements and rebate amounts for qualifying equipment under SRP's FY10 PowerWise Standard Business Solutions program. It also includes instructions on how to complete the Rebate Application and information regarding any required additional documentation. SRP's PowerWise Standard Business Solutions provides rebates for many types of energy efficient technologies. Please read the following sections carefully to ensure that you purchase and install qualifying equipment.

In order to be eligible for rebates through the PowerWise Standard Business Solutions program all equipment must meet the following requirements:

- Equipment must be purchased on or after May 1, 2009.
- Equipment must be new and installed in a manner that meets or exceeds code regulations.
- Replaced equipment must be disposed of in accordance with local, state, or federal codes and regulations and cannot be re-installed elsewhere.

Pre-qualification of eligible measures under the PowerWise Standard Business Solutions program is not required **except** for Retrofit Lighting Equipment and occupancy sensors. Additional eligibility and submittal requirements for Motor and VFD technologies are outlined in this Equipment Catalog.

Rebates for additional measures may be available. For more information about PowerWise Standard Business Solutions, eligibility requirements, rebate levels, other SRP energy efficiency programs, or general inquiries, contact a participating SRP Alliance Contractor. You can also visit the program's Web site at srpnet.com/powerwisebiz, email us at PowerWiseStandardBusinessSolutions@srpnet.com, or contact the PowerWise Business Solutions hotline at 602-236-3054.

PREMIUM EFFICIENCY MOTORS

Measure Description: Premium efficiency motors are more efficient than standard efficiency motors.

Applicability: New construction and retrofit installations are eligible.

Equipment Eligibility: Motors that are eligible for incentives under the PowerWise Standard Business Solutions program include new, three phase, induction motors, NEMA Design A & B, 1-500 HP, Open Drip Proof (ODP) or Totally Enclosed Fan Cooled (TEFC), 1200, 1800, or 3600 RPM. Minimum efficiency requirements shown in Table M-1 below are the NEMA Nominal Full-Load Efficiency rating from the motor nameplate as determined in accordance with IEEE Standard 112, Test Method B. Contact your vendor or the Program Administrator to determine whether other motor classifications or sizes qualify for rebates before purchasing. The NEMA Premium efficiency ratings listed are nominal full-load efficiency ratings. Equipment may be installed or placed into inventory, and must meet all other program terms and conditions.

Items to submit with Rebate Application: 1. Dated sales receipt/invoice

Instructions for Rebate Application: In the Rebate application note the "Efficiency" as the nominal full-load efficiency and the "Measure Size" as the nameplate horsepower rating.

Measure Rebate: Rebate amount for qualifying measures are listed below in Table M-1.

Table M-1. Premium Efficiency Motor Requirements and Rebate Levels								
Hp	Equipment Code	1200 RPM		1800 RPM		3600 RPM		Rebate per Motor
		ODP	TEFC	ODP	TEFC	ODP	TEFC	
1	M1	82.5%	82.5%	85.5%	85.5%	77.0%	77.0%	\$30
1.5	MD15	86.5%	87.5%	86.5%	86.5%	84.0%	84.0%	\$30
2	M2	87.5%	88.5%	86.5%	86.5%	85.5%	85.5%	\$35
3	M3	88.5%	89.5%	89.5%	89.5%	85.5%	86.5%	\$35
5	M5	89.5%	89.5%	89.5%	89.5%	86.5%	88.5%	\$40
7.5	MD75	90.2%	91.0%	91.0%	91.7%	88.5%	89.5%	\$60
10	M10	91.7%	91.0%	91.7%	91.7%	89.5%	90.2%	\$65
15	M15	91.7%	91.7%	93.0%	92.4%	90.2%	91.0%	\$75
20	M20	92.4%	91.7%	93.0%	93.0%	91.0%	91.0%	\$80
25	M25	93.0%	93.0%	93.6%	93.6%	91.7%	91.7%	\$90
30	M30	93.6%	93.0%	94.1%	93.6%	91.7%	91.7%	\$105
40	M40	94.1%	94.1%	94.1%	94.1%	92.4%	92.4%	\$130
50	M50	94.1%	94.1%	94.5%	94.5%	93.0%	93.0%	\$155
60	M60	94.5%	94.5%	95.0%	95.0%	93.6%	93.6%	\$175
75	M75	94.5%	94.5%	95.0%	95.4%	93.6%	93.6%	\$200
100	M100	95.0%	95.0%	95.4%	95.4%	93.6%	94.1%	\$255
125	M125	95.0%	95.0%	95.4%	95.4%	94.1%	95.0%	\$365
150	M150	95.4%	95.8%	95.8%	95.8%	94.1%	95.0%	\$430
200	M200	95.4%	95.8%	95.8%	96.2%	95.0%	95.4%	\$465
250	M250	95.4%	95.8%	95.8%	96.2%	95.0%	95.8%	\$530
300	M300	95.4%	95.8%	95.8%	96.2%	95.4%	95.8%	\$610
350	M350	95.4%	95.8%	95.8%	96.2%	95.4%	95.8%	\$745
400	M400	95.8%	95.8%	95.8%	96.2%	95.8%	95.8%	\$825
450	M450	96.2%	95.8%	96.2%	96.2%	95.8%	95.8%	\$905
500	M500	96.2%	95.8%	96.2%	96.2%	95.8%	95.8%	\$990

ELECTRONICALLY COMMUTATED MOTORS

Measure Description: An electronically commutated motor (ECM) is a fractional horsepower direct current (DC) motor used most often in commercial refrigeration applications such as display cases, walk-in coolers/freezers, refrigerated vending machines, and bottle coolers. ECMs can also be used in HVAC applications, primarily as small fan motors for packaged terminal units or in terminal air boxes.

Applicability: New construction and retrofit installations are eligible.

Equipment Eligibility: All ECMs up to 1 HP in size may qualify for an incentive. Equipment must be purchased and installed, and meet all other program terms and conditions.

- Items to submit with Rebate Application:**
1. Dated sales receipt/invoice
 2. Manufacturer’s equipment specification sheet

Instructions for Rebate Application: In the Rebate application mark the “Efficiency” as “NA” and the “Measure Size” as the nameplate motor size.

Measure Rebate: Rebate amount for qualifying measures are listed below in Table M-2.

Table M-2. Electronically Commutated Motors (ECM)

Equipment Code	Measure Description	Unit	Rebate
ECMREF	Refrigeration Application	Nameplate Wattage	\$0.50/watt
ECMHVC	HVAC Application	Nameplate HP	\$50/HP

VARIABLE FREQUENCY DRIVES

Measure Description: Variable Frequency Drives (VFDs) are electronic controls that regulate motor speed and torque, resulting in reduced energy consumption under part load conditions.

Applicability:

For retrofit projects: For HVAC installations where a variable load is present, any throttling or bypass devices (such as inlet vanes), bypass dampers, three-way valves or throttling valves must be removed or permanently disabled to qualify for HVAC fan and pump VFD rebates. Savings will only be realized where a variable load is present. Rebates are not available for retrofits of existing VFDs.

For new construction projects: Rebates are not available where VFDs are required by ASHRAE 90-1 2004, which requires a VFD on HVAC fans \geq 10 horsepower (where a variable flow system is required).

Equipment Eligibility: The rebates listed for this measure apply to fan and pump applications on HVAC distribution systems. The maximum fan or pump size is 100 hp. Equipment must be purchased and installed, and meet all other program terms and conditions.

VFDs larger than 100 hp or installed on non-HVAC equipment may be eligible for rebates under the PowerWise Custom Business Solutions program. For more information about this program, contact the Program Administrator **before** you purchase your equipment.

Items to submit with Rebate Application: 1. Dated sales receipt/invoice

Instructions for Rebate Application: In the Rebate application mark the "Efficiency" as "NA" and the "Measure Size" as the nameplate motor size of the affected motor.

Measure Rebate: Rebate amount for qualifying measures are listed below in Table M-3.

Table M-3. Variable Frequency Drives (VFDs)

Equipment Code	Measure Description	Unit	Rebate
VDFD	HVAC Fan \leq 100 HP	HP	\$55/HP
VFDP	HVAC Pump \leq 100 HP	HP	\$55/HP