

The following tables list the product requirements and rebates available for energy-efficient motors and variable speed drives (VSDs). For more information please visit our website [www.energycyns.ca/ber](http://www.energycyns.ca/ber).

### 3- Phase Electric Motors

**New** motors that operate at least **2,000** hours a year are eligible for rebates. Eligible motors are listed on the Consortium for Energy Efficiency (CEE) website's Premium Efficiency Motors List or meet the NEMA nominal efficiencies below.

Open Proof Drip (OPD) Motors					Totally Enclosed Fan Cooled (TEFC) Motors				
hp Rating	NEMA Nominal Efficiency			Rebate Amount	hp Rating	NEMA Nominal Efficiency			Rebate Amount
	1200 RPM	1800 RPM	3600 RPM			1200 RPM	1800 RPM	3600 RPM	
1	82.5%	85.5%	77.0%	<b>\$10</b>	1	82.5%	85.5%	77.0%	<b>\$10</b>
1.5	86.5%	86.5%	84.0%	<b>\$15</b>	1.5	87.5%	86.5%	84.0%	<b>\$15</b>
2	87.5%	86.5%	85.5%	<b>\$20</b>	2	88.5%	86.5%	85.5%	<b>\$20</b>
3	88.5%	89.5%	85.5%	<b>\$25</b>	3	89.5%	89.5%	86.5%	<b>\$25</b>
5	89.5%	89.5%	86.5%	<b>\$35</b>	5	89.5%	89.5%	88.5%	<b>\$35</b>
7.5	90.2%	91.0%	88.5%	<b>\$50</b>	7.5	91.0%	91.7%	89.5%	<b>\$50</b>
10	91.7%	91.7%	89.5%	<b>\$60</b>	10	91.0%	91.7%	90.2%	<b>\$60</b>
15	91.7%	93.0%	90.2%	<b>\$80</b>	15	91.7%	92.4%	91.0%	<b>\$80</b>
20	92.4%	93.0%	91.0%	<b>\$110</b>	20	91.7%	93.0%	91.0%	<b>\$110</b>
25	93.0%	93.6%	91.7%	<b>\$120</b>	25	93.0%	93.6%	91.7%	<b>\$120</b>
30	93.6%	94.1%	91.7%	<b>\$130</b>	30	93.0%	93.6%	91.7%	<b>\$130</b>
40	94.1%	94.1%	92.4%	<b>\$150</b>	40	94.1%	94.1%	92.4%	<b>\$150</b>
50	94.1%	94.5%	93.0%	<b>\$200</b>	50	94.1%	94.5%	93.0%	<b>\$200</b>
60	94.5%	95.0%	93.6%	<b>\$220</b>	60	94.5%	95.0%	93.6%	<b>\$220</b>
75	94.5%	95.0%	93.6%	<b>\$250</b>	75	94.5%	95.4%	93.6%	<b>\$250</b>
100	95.0%	95.4%	93.6%	<b>\$320</b>	100	95.0%	95.4%	94.1%	<b>\$320</b>
125	95.0%	95.4%	94.1%	<b>\$360</b>	125	95.0%	95.4%	95.0%	<b>\$360</b>
150	95.4%	95.8%	94.1%	<b>\$400</b>	150	95.8%	95.8%	95.0%	<b>\$400</b>
200	95.4%	95.8%	95.0%	<b>\$560</b>	200	95.8%	96.2%	95.4%	<b>\$560</b>

### Electronically Commutated (Brushless) DC Motors for Refrigeration Applications

**New** motors that operate at least **2,000** hours a year are eligible for rebates.

EC Motors for Refrigeration Applications			
Product Category	Availability	Rebate Amount	Criteria
Electronically Commutated (Brushless) DC Motors for Walk-In Cooler Evaporator Fans	In-store	<b>Up to \$180</b>	Minimum nameplate hp of 1/20
Electronically Commutated (Brushless) DC Motors for Standalone Retail Cooler Evaporator Fans	In-store	<b>Up to \$60</b>	Minimum nameplate hp of 1/100

\*A list of participating distributors can be found on our website at: [http://www.energycyns.ca/for\\_business/energy\\_savings\\_programs/business\\_energy\\_rebates/participating\\_electrical\\_distributors/](http://www.energycyns.ca/for_business/energy_savings_programs/business_energy_rebates/participating_electrical_distributors/)

## Variable Frequency Drives (VFDs)

VFDs must be new and not replace existing VFDs. VFDs controlled automatically by differential pressure, flow or temperature are eligible for rebates. Each VFD must include a minimum 3% impedance series reactor in its AC input connections. Ask your supplier to help with the sizing of the reactor.

VFDs that control HVAC systems, water supply systems, wastewater systems, or process systems up to 40 hp are eligible for rebates.

In order to determine the rebate amount for your application, please complete the attached VFD worksheet in the highest level of detail possible.

**Please Note:** VFDs that control forward-curve fans with inlet guide vanes or variable pitch vane-axial fans or are not eligible for rebates.

Variable Frequency Drives		
	Equipment Controlled	Rebate Amount / hp Controlled
<b>New</b> motors that operate at least <b>2,000</b> hours a year are eligible for rebates.	Supply Fan	<b>\$120</b>
	Return Fan	<b>\$180</b>
	Exhaust Fan	<b>\$90</b>
	Chilled Water Pump	<b>\$210</b>
	Boiler Feed Water	<b>\$90</b>
	Other	<b>\$80</b>

Motors												
Installation Location		Motor Type	hp Rating	Manufacturer	Model Number	Nameplate Efficiency	Product Runtime (hours per week)	Function	Speed (RPM) (See Table)	(A) Quantity	(B) Rebate/Unit (See Table)	Sub-total (A) x (B)
Mechanical Room 1, Supply Fan 1	Existing	TEFC	30	ABC Co.	TR00745	91.0%	60	Fan	1,800	2	N/A	N/A
	New	TEFC	30	XYZ Inc.	Super-M	93.6%	40	Fan	3,600	2	\$390	\$780
	Existing										N/A	N/A
	New											
	Existing										N/A	N/A
	New											
	Existing										N/A	N/A
	New											
	Existing										N/A	N/A
	New											
	Existing										N/A	N/A
	New											
	Existing										N/A	N/A
	New											
	Existing										N/A	N/A
	New											
	Existing										N/A	N/A
	New											
	Existing										N/A	N/A
	New											
<b>Subtotal</b>												

### Variable Frequency Drives

Installation Location	Equipment Controlled by VSD	Existing Control Method	Manufacturer	Model Number	Min Flow of Equipment (%)	Static Head (% of head at rated flow) (Pumps only)	Pressure at zero flow (%)	Usage (hours/year)	hp of Motor Controlled by VSD	(A) Quantity
Mechanical Room 1	Supply Fan 1	Damper	ABC Co.	TEFC - 0265	25%	75%	140%	3,000	7.5	2

### Variable Frequency Drives Load Calculation\* (for above)

Installation Location 1		Installation Location 2		Installation Location 3	
Motor RPM	Motor Nominal Efficiency	Motor RPM	Motor Nominal Efficiency	Motor RPM	Motor Nominal Efficiency
% Load	Usage (hours/year)	% Load	Usage (hours/year)	% Load	Usage (hours/year)
20		20		20	
30		30		30	
40		40		40	
50		50		50	
60		60		60	
70		70		70	
80		80		80	
90		90		90	
100		100		100	

\*Complete this table if you know or can estimate the load profile for the controlled motor