

# 2017 Motors Commercial & Industrial Retrofit



## Instructions for completing the Retrofit MOTOR Incentive Worksheet

### General Notes:

1. This application is for replacing existing operating motors with new, higher efficiency motors.
2. Incentives will be provided to purchase premium efficiency induction motors of the same size (or smaller) horsepower and Electronically Commutated (EC) Motors. EC Motors are efficient fractional HP motors.
3. The existing and proposed induction motor speed should match speed of the motor as closely as possible. It is suggested that the new motor be no more than a 10-rpm or 5% increase in speed.
4. NEMA Nominal efficiency nameplate ratings are tested in accordance with IEEE Standard 112, Method B. To ensure that the motor will perform well, the customer should check its NEMA design code, insulating class, and service factor.
5. Invoices will be required for payment of Incentives.
6. The Incentive, in conjunction with all other sources of funding, cannot exceed the total project cost.

### Eligibility Requirements:

1. The existing motor must be in-place and operational at the time of pre-inspection.
2. Failed, end of life and new equipment motors are not eligible for Incentives under this program but may be eligible under NE&C Program.
3. Program covers induction motors from 1 to 200 HP. Motors over 200 HP may be eligible under the Custom Retrofit Program.
4. Motors must be new, three phase induction motors, NEMA Design A & B, 1 – 200 HP, Open Drip Proof (ODP), Totally Enclosed Fan Cooled (TEFC), 1200, 1800, or 3600 RPM, or Electronically Commutated (EC) Motors.
5. EC Motors for fan powered terminal boxes, refrigeration fan coils or HVAC Supply Fans on small unitary equipment are eligible for this Incentive. Other equipment and applications may be eligible under the Retrofit Custom Program.
6. Motor must operate at least 2000 hours per year to be eligible for prescriptive Incentives.
7. The Incentive offer is not valid unless the Motor Incentive form is fully and accurately completed, signed and dated by the customer and the vendor. The Customer also agrees that they have read and comply with the eligibility requirements.

### Pre-installation:

1. Review eligibility requirements.
2. Review specifications for the proposed equipment to confirm it meets the minimum efficiency requirements.
3. Provide to the utility representative the manufacturer's equipment specifications and record the following information on the worksheet:
  - o Motor manufacturer, model, size (HP or kW), and speed, (1170 rpm, 1780 rpm, 3600 etc - induction motors):
  - o Induction Motor Type (Open drip proof (ODP) , totally enclosed fan-cooled (TEFC). For Electronically Commutated (EC) Motors use the EC Motor table
  - o Motor function (i.e. fan, pump, etc.) and motor location (mechanical room 1<sup>st</sup> floor, cafeteria, etc.)
  - o Annual motor operating hours (must be >=2000 hours), motor quantity
  - o Incentive amount for each new motor are shown on motor worksheet

## RETROFIT INDUCTION MOTOR INCENTIVE WORKSHEET

Item	Manufacturer & Model Information	Motor Size (HP)	Motor Type (ODP / TEFC)	Motor RPM	Motor Function	Annual Operating Hours	New Motor Efficiency	Incentive (\$)	Quantity of Motors	Total Incentive (\$)
Ex.	GE 122	30 HP	TEFC	1800	fan	6,570	89.0		2	
New	GE Model E123	30 HP	TEFC	1800	fan	6,570	93.6	\$465	2	\$930
	Refer to manufacture's motor information				"	Customer or Vendor to provide	Actual Nameplate Data	See Table	Number being installed	Calculate the Incentive

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## RETROFIT EC MOTOR INCENTIVE WORKSHEET

Item	System Type (Refrigeration or HVAC)	Fan Load (kW for Refrigeration/CFM for HVAC)	Evap Fan Controls (Y/N)	Annual Hours	Quantity of Motors	Incentive per Motor (\$)	Total Incentive (\$)
Ex.	Refrigeration	0.198 kW	N	4,000	2		
New	Refrigeration	0.187 kw	N	4,000	2	\$100	\$200
	<b>What System is the EC Motor being installed on</b>	<b>Refer to Manufacturer's Specifications</b>	<b>Are there controls ?</b>	<b>State annual hours</b>	<b>Number of EC Motors</b>	<b>Refer to Incentiv e Form</b>	<b>Calculate the Incentive</b>

### Post Installation:

Utility Representative must verify that:

1. The motor has been installed and is operable.
2. The motor matches the information on the Incentive application. If the motor has changed from what was approved for the initial Incentive offer, the substituted motor specifications must be submitted, reviewed to verify compliance with technical requirements and approved before a Incentive is considered.
3. The existing motor information has been recorded.
4. The invoice or proof of payment has been submitted.
5. The Utility Representative & Customer have signed & dated the post installation inspection block on the Incentive form.