

Refrigeration Incentives Worksheet

January 1, 2023 - December 31, 2023

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Customer Name: _____

DIRECTIONS: Please save a copy of this form to your computer by selecting "File/Save As" before entering text and numbers. Then fill in your information electronically and select "Save." Note that this form requires Adobe Reader® version 11.0 to function properly. Download the most recent version of Adobe Acrobat Reader DC® at <https://get.adobe.com/reader/>.

Pre-application is required; review instructions on the standard incentives application form. Wait for a reservation letter before starting your project.

EC Motors

Specifications and Eligible Equipment:

1. Replacement unit must be an electronically commutated motor with a minimum efficiency of 66%.
2. New walk-in or reach-in coolers and freezers with integrated EC motors do not qualify for this incentive.
3. This measure cannot be used in conjunction with the evaporator fan controls measures.

EC Motor for Walk-in Cooler or Freezer

\$60 per motor

Replacement of an existing, uncontrolled, continuously operating, standard-efficiency shaded-pole evaporator fan motor with an electronically commutated (EC) motor.

Number of
Motors

EC Motor for Reach-in Refrigerated Case

\$30 per motor

Replacement of an existing, uncontrolled, continuously operating, standard-efficiency shaded-pole evaporator fan motor with an electronically commutated (EC) motor.

Number of
Motors

EC Motors (Continued)

EC Motor with Evaporator Fan Controls for Walk-in Cooler or Freezer

\$90 per controlled motor

Replacement of an existing standard-efficiency shaded pole evaporator fan motor without controls with an electronically commutated (EC) evaporator fan motor with controls in medium and low temperature walk-in coolers and freezers.

Specifications and Eligible Equipment:

1. Must control a minimum fan load of 1/20 HP where the fan(s) operate continuously at full speed.
2. Must reduce fan motor power by at least 75 percent during the compressor off-cycle.
3. This measure is not applicable if any of the following existing (base case) conditions apply:
 - a. The compressor runs all the time with high duty cycle.
 - b. The evaporator fan does not run at full speed all the time.
 - c. The evaporator fan motor runs on poly-phase power.
 - d. The evaporator does not use off-cycle or time-off defrost.

**Number of
Motors**

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**Incentive
Subtotal**

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Anti-Sweat Heater Controls for Glass Door Cooler or Refrigerator

\$62.50 per door

Installation of controls that turn off door heaters when there is low risk of condensation, based on either: (1) the relative humidity of the air in the store or (2) the conductivity of the door (which drops when condensation appears).

Specifications and Eligible Equipment:

1. Existing heater must be uncontrolled and operating continuously at full power.
2. Controls must be installed on all doors of the case.

**Number of
Doors**

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**Incentive
Subtotal**

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Display Cases with Doors

Specifications and Eligible Equipment:

1. Case must be equipped with:
 - a. High efficiency T8 lamp and electronic ballast or LED lighting
 - b. Electronically commutated motors (ECMs)
 - c. High-efficiency glass doors that meet the specifications outlined under special doors with low/no anti-sweat heaters on display cases, below
 2. Retrofit case length cannot exceed the length of the original case.
 3. This measure applies to remote cases only.
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Cooler Display Cases with Doors

\$260 per linear foot

Replacement or retrofit of existing open vertical (or multi-deck) display cases with new reach-in glass door display cases. New cases (i.e., cases that do not replace older cases) are not eligible.

Linear Feet

Freezer Display Cases with Doors

\$260 per linear foot

Replacement or retrofit of existing open vertical (or multi-deck) display cases with new reach-in glass door display cases.

Linear Feet

Incentive
Subtotal

Special Doors With Low/No Anti-Sweat Heaters (ASH) On Display Cases

Specifications and Eligible Equipment:

1. The display case temperature set point is between 0 and 40 degrees Fahrenheit
2. The new door must prevent condensation within the frame assembly.
3. The total wattage from the door rail, glass, and frame heater is not more than 7.1 watts per square foot (W/ft²) of door opening.
4. The door's total rail, glass and frame heater amperage (at 120V) cannot exceed 0.587 A per door for coolers and 1.360 A per door for freezers.
5. This measure cannot be used in conjunction with anti-sweat heater controls for glass door cooler or refrigerator or cooler/freezer display cases with doors measures.

Special Doors with Low/No Anti-Sweat Heaters (ASH) on Cooler Display Cases

\$190 per door

Replacement of a standard one-pane glass display case door with anti-sweat heater with a special display case glass door that eliminates the need for anti-sweat heaters.

Number of Doors

Special Doors with Low/No Anti-Sweat Heaters (ASH) on Freezer Display Cases

\$190 per door

Replacement of a standard one-pane glass display case door with anti-sweat heater with a special display case glass door that eliminates the need for anti-sweat heaters.

Number of Doors

Evaporator Fan Controls on EC Motor

\$50 per controlled motor

In medium and low temperature walk-in coolers and freezers with existing electronically commutated (EC) evaporator fan motors, installation of controls that reduce airflow of the evaporator fans when there is no refrigerant flow.

Specifications and Eligible Equipment:

1. Must control a minimum fan load of 1/20 HP where the fan(s) operate continuously at full speed.
2. Must reduce fan motor power by at least 75 percent during the compressor off-cycle.
3. This measure is not applicable if any of the following existing (base case) conditions apply:
 - a. The compressor runs all the time with high duty cycle.
 - b. The evaporator fan does not run at full speed all the time.
 - c. The evaporator fan motor runs on poly-phase power.
 - d. The evaporator does not use off-cycle or time-off defrost.

Number of Controlled Motors

Incentive Subtotal

Demand Defrost Controls

Specifications and Eligible Equipment:

1. The current system must include an operating electric defrost system with a functional electro-mechanical time clock.
 2. Evaporator coil temperature and pressure must be monitored by controller in order to determine optimal defrost cycles.
 3. New intelligent control systems to control the defrost systems will typically replace timed-defrost controls.
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Demand Defrost Controls on Walk-in Coolers

\$20 per evaporator fan motor

Installation of defrost controls that monitor the refrigeration system and delay the defrost cycles as necessary.

Number of
Motors

Demand Defrost Controls on Walk-in Freezers

\$20 per evaporator fan motor

Installation of defrost controls that monitor the refrigeration system and delay the defrost cycles as necessary.

Number of
Motors

Efficient Refrigeration Condenser

\$10 per ton

Design and installation of oversized condensers for multiplex refrigeration systems. The design reduces the approach (difference in refrigerant condensing temperature and ambient dry-bulb temperature), lowers the head pressure and conserves compressor horsepower.

Specifications and Eligible Equipment:

1. The new condenser must result in at least 85 Btu/hr of heat rejection per watt of fan power for air-cooled condensers.
 2. For evaporative cooled equipment, a minimum of 195 Btu/hr per watt is required.
 3. New condenser must be more efficient than condenser being replaced.
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Number of
Tons

Incentive
Subtotal

Floating Head Pressure Controls

Specifications and Eligible Equipment:

1. Controls must vary head pressure to adjust condensing temperatures in relation to outdoor air temperature.
2. Must replace existing constant pressure or manually controlled systems to achieve reduced head pressure in order to maintain a minimum saturated condensing temperature of 70°F, or a 20°F variance below design heat pressure during mild weather conditions.
3. Compressors must be 1HP or greater.
4. A photo confirming the compressor HP is required to be submitted along with the pre-application.

Single Compressor to Single Condenser System

\$60 per compressor HP

Installation of automatic control to reduce condensing pressure at lower ambient temperatures in refrigeration systems.

Total Compressor Size (HP)

Multiple Compressors to Single Condenser System

\$60 per compressor HP

Installation of automatic control to reduce condensing pressure at lower ambient temperatures in refrigeration systems.

Total Compressor Size (HP)

Incentive Subtotal

LED Refrigerated Display Case Lighting

LED Refrigerated Display Case Lighting for Open Cases

\$24 per linear foot of lamp for open case

Replacement of fluorescent refrigerated display case lighting with a DLC-qualified LED fixture.

Specifications and Eligible Equipment:

1. The product must be listed on the DesignLights™ Consortium qualified products list available at designlights.org.
2. Include the linear feet of all shelves with individual lighting.
 - a. Example: a 6 foot case with 3 individually-lit shelves equals 18 linear feet; a 6 foot case with 3 shelves, 1 individually-lit shelf and 2 non-lit shelves, equals 6 linear feet.
3. May be eligible for new, replacement cases if existing fluorescent cases can be shown/documentated.

Linear Feet

Incentive

LED Refrigerated Display Case Lighting for Closed Cases

\$60 per door for closed case

Replacement of fluorescent refrigerated display case lighting with a DLC-qualified LED fixture.

Specifications and Eligible Equipment:

1. The product must be listed on the DesignLights™ Consortium qualified products list available at designlights.org.

Number of Doors

Incentive

Incentive Subtotal

Night Covers

Specifications and Eligible Equipment:

1. Incentives are available for new and existing equipment.
2. Display cases that operate at sub-zero Fahrenheit temperatures are not eligible for this incentive.
3. Curtains or covers on top of open refrigerated or freezer display cases that are applied at least six hours (during off-hours) in a 24-hour period.

Night Covers - Vertical Open, Case Temperature (35°F to 55°F)

\$10 per linear foot

Installation of fitted covers on existing open-type refrigerated display cases that are deployed during the facility's unoccupied hours.

Linear Feet

Night Covers - Vertical Open, Remote Condensing, Case Temperature (0°F to 30°F)

\$10 per linear foot

Installation of fitted covers on existing open-type refrigerated display cases that are deployed during the facility's unoccupied hours.

Linear Feet

Night Covers - Horizontal Open, Case Temperature (35°F to 55°F)

\$10 per linear foot

Installation of fitted covers on existing open-type refrigerated display cases that are deployed during the facility's unoccupied hours.

Linear Feet

Night Covers - Horizontal Open, Case Temperature (0°F to 30°F)

\$10 per linear foot

Installation of fitted covers on existing open-type refrigerated display cases that are deployed during the facility's unoccupied hours.

Linear Feet

Incentive
Subtotal

Strip Curtains

Specifications and Eligible Equipment:

1. This measure is only applicable for walk-in coolers and freezers in the following facility types:
 - a. Grocery stores
 - b. Retail/service (convenience stores)
 - c. Restaurants
2. All other facility types are not eligible for this incentive but may be eligible for a custom incentive. Please specify from one of the above facility types in the application description.
3. The existing doorway must have either no existing strip curtain or have an existing strip curtain that is no longer effective.
4. Strip curtains must be at least 0.06 inches thick and low temperature strip curtains must be used on low temperature applications (e.g. freezers).
5. Accurate door dimensions are required as this incentive is based on square footage.
6. The new strip curtain must cover the entire doorway area when the door is open.

Strip Curtains – Cooler Door

\$4 per square foot

Installation of a strip curtain on a walk-in cooler door in either grocery stores, retail/service (convenience stores) or restaurants.

Square Feet

Strip Curtains – Freezer Door

\$4 per square foot

Installation of a strip curtain on a walk-in cooler door in either grocery stores, retail/service (convenience stores) or restaurants.

Square Feet

Incentive Subtotal

Automatic High Speed Doors

Specifications and Eligible Equipment:

1. Automatic high speed doors must be installed in place of strip curtains, separating spaces with different cooling set points.
 2. Accurate door dimensions are required as this incentive is based on square footage. The new automatic high speed door must cover the entire doorway area when the door is closed.
 3. The automated door must be used in applications recommended by the automatic high speed door manufacturer.
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Automatic High Speed Doors – Freezer and Cooler Spaces

\$50 per square foot

Installation of high speed doors in place of strip curtains, separating freezer and cooler spaces with different cooling set points.

Square Feet

Automatic High Speed Doors – Freezer and Dock Spaces

\$50 per square foot

Installation of high speed doors in place of strip curtains, separating freezer and dock spaces with different cooling set points.

Square Feet

Automatic High Speed Doors – Cooler and Dock Spaces

\$50 per square foot

Installation of high speed doors in place of strip curtains, separating cooler and dock spaces with different cooling set points.

Square Feet

Incentive
Subtotal

Automatic Door Closer

\$120 per unit

Installation of an auto-closer to the main insulated opaque door(s) of a walk-in cooler or freezer.

Specifications and Eligible Equipment:

1. The auto-closer must firmly close the door when it is within 1 inch of full closure.
2. Measure should be installed on a walk-in cooler or freezer without an automatic closure.

Number
of Units

Variable Speed Drive for Condenser Fan

\$150 per horsepower

The addition of a variable speed drive (VSD) to a condenser fan motor (of a refrigeration system) operating at a fixed speed. The VSD should modulate motor power to match condenser load.

Specifications and Eligible Equipment:

1. Measure is applicable to VSDs installed on condenser fan motors operating in refrigeration systems.
2. New motors installed without a VSD qualify for this measure.
3. Existing motor load must operate at fixed speeds.
4. Motors must be 0.5-1.5 HP.
5. Screenshots of the control system sequence may be requested.

Horsepower

Incentive
Subtotal

Grand Total Incentive Requested

Incentive cannot exceed 100% of the incremental measure cost and 100% of the total project cost and must meet all program terms and conditions.