FridgeWize

FridgeWize Presents: Electronically Commutated Motors
FOR WALK-IN AND DISPLAY CASE REFRIGERATION SYSTEMS

THE MOST ENERGY EFFICIENT MOTORS IN THE INDUSTRY

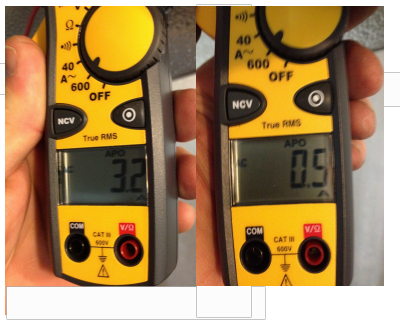
THE FridgeWize ADVANTAGE

- **ENERGY COST SAVINGS UP TO 70%**
  Installing FridgeWize EC motors reduce energy usage by up to 70%.
- **WALK-IN TWO-SPEED CAPABILITIES**
  FridgeWize EC motors have two possible speeds and when accompanied by FridgeWize EC motor controllers can achieve savings upwards of 85%.
- **ADDITIONAL HEAT REDUCTION**
  FridgeWize EC motors achieve additional savings in the compressor because they give off a lot less heat than old Shaded Pole and PSC motors.
- **FRIDGEWIZE WARRANTY**
  FridgeWize EC motors come with an industry-standard one-year limited warranty.
- **ENERGY REBATES**
  FridgeWize EC motors are widely accepted where energy efficiency rebates are available.
- **"GO GREEN"**
  FridgeWize offers a proven solution to reduce your carbon footprint and monthly utility bill!

FridgeWize Electronically Commutated Walk-In and Reach-In Display Case Motors

Commerical refrigeration accounts for 20% of all energy used in this world. The FridgeWize Walk-In and Reach-In Display Case EC motors, when installed to upgrade your refrigeration systems, result in drastic energy savings. This translates to monetary savings on your monthly utility bill. FridgeWize offers dual-speed EC motors for commercial refrigeration applications as well as three-phased EC motors for industrial-sized applications.

Electronically Commutated (EC) Motors are a dramatic improvement over the older Shaded Pole and PSC motors commonly used in refrigeration systems. The motors are direct current (DC) motors with an electronic commutation control that make them turn. They typically save about 70% of the energy used by the Shaded Pole motors they replace. Because of their improved efficiency, some states have mandated their use in new equipment. If EC motor controllers are installed in addition to EC motors, the energy savings is even greater!



An amp clamp measurement at a store of a popular restaurant chain reveals a greater than 70% reduction in energy consumption when Shaded Pole motors (3.2 amp draw) are replaced with FridgeWize EC motors (0.5 amp draw).

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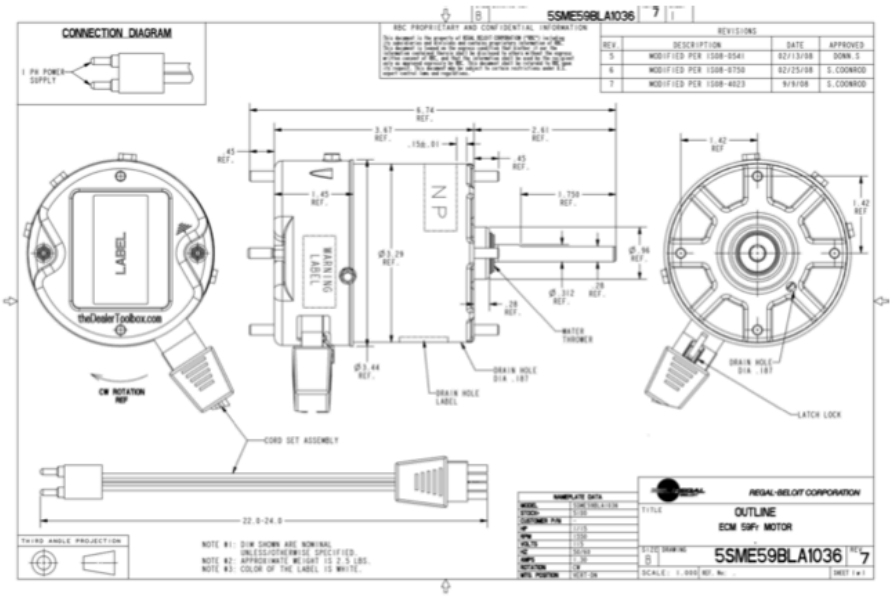
Motor Outline

The motor outline to the right is for a 1/15HP 115V Electronically Commutated motor with front and rear mounting studs.



Specifications

Input Line Volts: 115 or 208-230 VAC single phase, RBC factory configured. Units will start and operate at 90-132 VAC (115 VAC nom.) and 180-264 VAC (230 VAC nom). Operation at other than nominal voltage may change the performance.

Agency Ratings (MAX AMPS): 1/15 HP 115VAC: 1.3; 1/15 208-230VAC: 0.8

Rated Power (W) ECM shaft power is rated at nominal voltage at the speed of 1550RPM. Motor output will change as input voltage changes. At high voltage, the motor will produce more than the rated power; delineations below 43.6 oz-in will be based on electronic costs and market need)

For 1/15 HP Torque (oz-in) @ 1550 RPM 43.6; Shaft Watts: 50

Input Power (MAX): 1/15 HP 55°C: 71W

Phase/Hz: Single Phase AC source; 50/60 Hz

Overload: ECM is protected. UL60730 compliant

Humidity: 5 to 100% RH, condensing

Storage Temp: –40°C to 85°C

Operating Temp: –40°C to 85°C

Warranty: Limited one-year replacement warranty

Design Life: 10 years, 83,720 hours. On time, 14560 on/off cycles; 99% reliability at 80% confidence

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FridgeWize

FridgeWize Presents: Q12 & Q10 Carbon Fiber Fan Blades
FOR WALK-IN AND DISPLAY CASE REFRIGERATION SYSTEMS

THE MOST ENERGY EFFICIENT FAN BLADE IN THE INDUSTRY

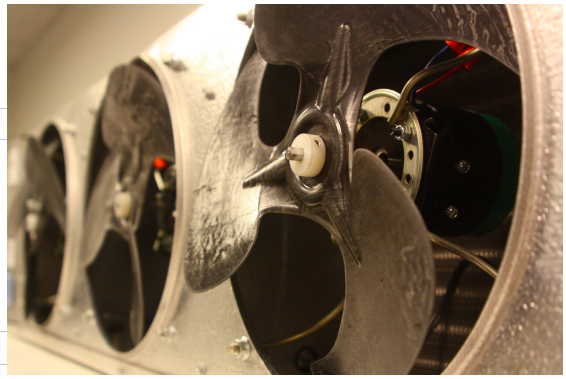
THE FridgeWize ADVANTAGE

- **LIGHTER THAN ALUMINUM**
  Lighter fan blades de-stress EC motors and substantially reduce amp draw by approximately 50% on EC motors with Q12 and Q10 fan blades.
- **STRONGER THAN ALUMINUM**
  FridgeWize fan blades are composed of a carbon fiber composite, with a tensile strength of 207,000 PSI, compared to aluminum's 20,000 PSI.
- **THINNER SLEEK DESIGN**
  FridgeWize Q blades have a teardrop design that allows for maximum efficiency while maintaining sufficient airflow.
- **FRIDGEWIZE WARRANTY**
  Q Blades come with a 10-year warranty.
- **MAINTAINING SHAPE**
  Fan blades maintain their manufactured shape and cannot be bent, unlike aluminum fan blades.
- **NOISE REDUCTION**
  Q Blades have reduced noise levels while in operation, and cannot rust to the shaft of the motor.

FridgeWize Q12 and Q10 Fan Blades Used In Conjunction With Walk-In EC Motors

FridgeWize has engineered and developed the world's most energy efficient fan bade. This new combination of FridgeWize EC motor and carbon fiber fan blade has set new industry standards in efficiency. Not only is this blade built to be stronger than anything on the market today, it is specifically designed to reduce energy consumption. This translates to dollar savings on your monthly utility invoice as well as benefitting clients with a more durable product.

Q12 and Q10 fan blades are a dramatic improvement over the older aluminum and plastic fan blades commonly used in refrigeration systems. The new blade contains numerous features that make them superior to all aluminum blades on the market. The lighter blade will de-stress any EC motor which results in lower amp draw as well as reduced compressor duty cycles. This lightweight compound will flex but always conform back to its original position. Aluminum blades are known to bend easily therefore becoming unbalanced. Unbalanced blades result in increased noise and energy consumption.



Retrofitting new carbon fiber blades on EC motors will optimize your efficiency and increase longevity of your existing equipment.

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FridgeWize

FridgeWize Presents: Anti-Sweat Heater Controls

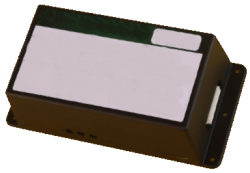
FOR MEDIUM AND LOW TEMP GLASS DISPLAY DOORS

THE MOST ENERGY EFFICIENT CONTROLLER IN THE INDUSTRY

THE FridgeWize ADVANTAGE

- **ENERGY COST SAVINGS UP TO 80%**
  Implementing FridgeWize ASHC reduces anti-sweat heater energy usage by 80%.
- **SELECTIVE HEATER ACTIVATION**
  ASHC are activated only when condensation levels reach a specific threshold.
- **INDEPENDENT CASE CONTROL**
  The LT regulates each case independently offering both kWh savings and demand kW savings.
- **FRIDGEWIZE WARRANTY**
  FridgeWize MT and LT anti-sweat heater controls come with a limited one-year replacement warranty.
- **ENERGY REBATES**
  Our anti-sweat heater controls are widely accepted where energy efficiency rebates are available.
- **"GO GREEN"**
  FridgeWize offers a proven solution to reduce your carbon footprint and monthly utility bill!

FridgeWize Anti-Sweat Heater Control Models MT and LT



Realize drastic energy savings in your reach-in refrigeration systems with the FridgeWize Anti-Sweat Heater Controls (ASHC). We supply both mid-temperature range (MT) and low-temperature range (LT) controllers to regulate anti-sweat heaters in the doorframes of reach-in refrigerators and freezers.

Our ASHCs have been designed to maximize savings in your reach-in refrigerator systems. The built-in programmed maintenance cycle (PMC) technology assures that all display cases remain sweat, frost and ice-free. The PMC works by first activating the frame and mullion heaters for 15 minutes and then activating the door heaters for 15 minutes. Both heaters are activated once every three hours. Manufacturers of glass display doors recommend that anti-sweat heaters do not remain off for long periods of time to prevent sweat, frost and ice-buildup in areas such as mullion chambers, electrical raceways and door gaskets. Random-start technology assures that the PMC will cycle at different times on different cases even if there is a loss of power, which is what allows **FridgeWize ASHC** to save significantly more energy than all other competitors.

- **MT Anti-Sweat Heater Controls:** utilize a digital moisture sensor to activate the anti-sweat heaters only when the threat of moisture is present.
- **LT Anti-Sweat Heater Controls:** utilize a digital moisture sensor to activate the anti-sweat heaters only when needed. Additionally, they possess two-channel technology to operate doors independently from the frame and mullion heaters..

Our anti-sweat controls are easy to install into your existing display cases and walk-ins without additional wiring. Precise placement of the moisture sensors offers maximum savings while assuring proper heat control.

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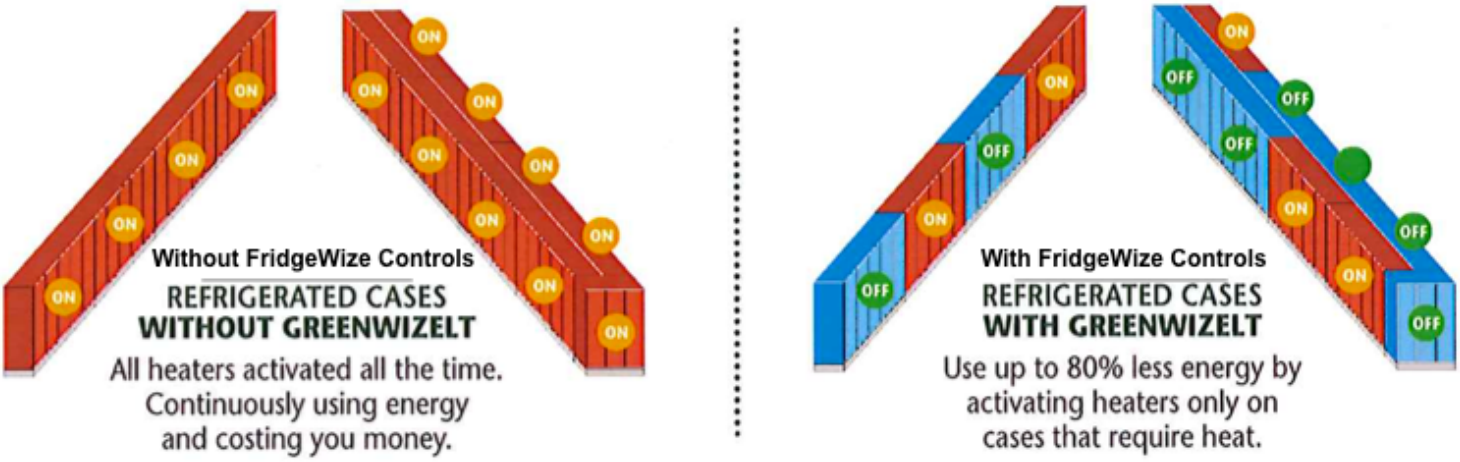
Typical Refrigerator Case Configuration



Above illustrates how the programmed maintenance cycle and the random start technologies working synergistically to regulate the timing and duration of anti-sweat controls to achieve 80% energy reduction consumed by reach-in doors in your display case and walk-in refrigeration systems.

Specifications

Type of service:	110 VAC	Enclosure:	POLYAC ABS PA-765
Input:	110 VAC 50-60 Hz	Operating Temp:	–54°F to 194°F
Output:	110 VAC 16 A resistive	Supply Cord:	12 AWG, 4 Conductor Type SOOW 600V 90C UL/CSA
Length: Width: Depth: Weight:	5.64” (14.3 cm) 3.26” (8.3 cm) 1.91” (8.4.8cm) 11 oz.	Color Code	Black – Line Red – Discreet Output White – Neutral/Line Green - Ground
		Warranty:	Limited one-year replacement warranty

Materials and components exceed UL and ULC standards.

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