

Saving Energy in Beverage Merchandisers



BENEFITS

- Save 22 percent of beverage merchandiser costs¹
- Payback periods as short as 4 months

APPLICATIONS

- Refrigerated beverage merchandisers

Distributed by:

 Wellington®

Saving Generation for the Next Generation



Saving Energy in Beverage Merchandisers

Beverage merchandisers are the most common type of plug in commercial refrigerators and are typically found in supermarkets and convenience stores.

In the United States, beverage merchandisers account for about 8 percent of packaged commercial refrigeration energy consumption², and in Europe an estimated 6.3 million units are in use³.

Because of their large numbers, beverage merchandisers are being included in new legislation targeting their vast energy saving potential.

Energy savings

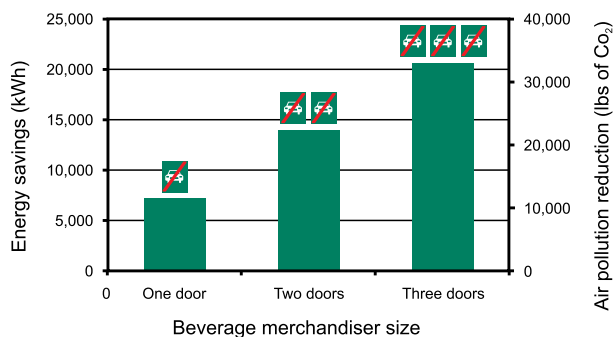
One door beverage merchandisers typically have one shaded pole motor driving the evaporator fan, and one driving the condenser fan.

The efficiency rate of these motors is in the order of 18%. This means that 82% of their energy consumption is transferred as waste heat to the environment, and has to be removed or cooled down again by the refrigeration and air conditioning system, causing additional consumption of energy.

ECR motors instead have efficiency rates up to 65% that dramatically reduce motor direct energy consumption, and yield additional energy savings by producing minimal waste heat.

ECR motors efficiency also reduces the load on the compressor and thus its operating time, allowing further energy savings.

Energy savings and air pollution reduction in beverage merchandisers with ECR motors⁴



In terms of environmental impact, this means that each one door beverage merchandiser using ECR motors saves over 10,000 lbs of carbon emissions during its life, the equivalent of taking one car off the road for a year; and two and three door beverage merchandisers save twice and three times this amount respectively.

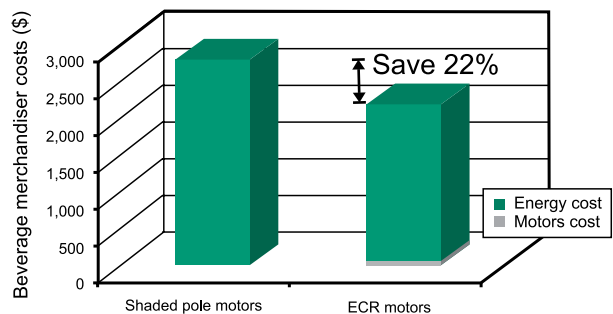
In Europe alone, where around 800,000 beverage merchandisers are sold each year⁵, this means potentially saving billions of lbs of carbon emissions, or taking the equivalent of over one million cars off the road for one year.

Cost savings

ECR motors reduce the overall cost of operating a beverage merchandiser by 22 percent, even when the additional initial cost of ECR over shaded pole motors is taken into account.

This, together with the maintenance savings and longer life of ECR motors when compared to shaded pole, and their very short payback periods, make Wellington's ECR a very cost effective solution for new beverage merchandisers and retrofit alike.

Impact of replacement of shaded pole motors with ECR on beverage merchandiser costs⁶



Wellington's ECR motors and fans were developed as new and retrofit energy saving replacements of shaded pole motors used in commercial refrigerators and freezers.

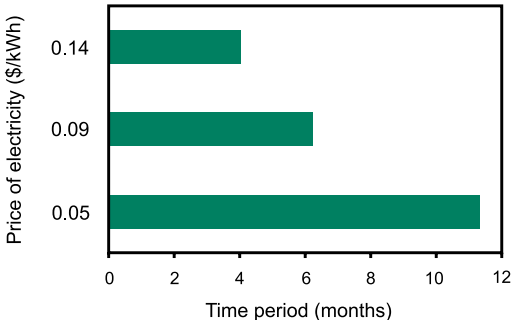
¹ For a one door beverage merchandiser, with estimated life of 8 years, two motors, and price of electricity 0.09\$/kWh.
² United States Consortium for Energy Efficiency. www.cee1.org
³ European Commission Directorate General for Energy and Transport (DGTREN).
⁴ Beverage merchandiser's life is estimated at 8 years. Carbon dioxide emission factor and equivalence from www.energystar.gov
⁵ European Commission Directorate General for Energy and Transport (DGTREN).

Payback period

ECR motors and fans have very short payback periods due to:

- high direct motor energy savings
- waste heat savings
- reduced compressor operating time
- low maintenance and service cost

ECR motors payback period⁷



With short payback periods and high energy savings the ECR series allows supermarkets and convenience stores to lower financial costs while preserving energy.

Product features

ECR motors are electronically commutated (ECM), brushless DC motors. Top quality electronics and design make ECR motors extremely efficient, quiet and reliable.

Extremely low levels of noise and vibration are achieved with our unique low torque ripple motor design.

Long design life and reliability are the result of Wellington’s moisture proof patented design, and allow maintenance and service cost savings.

Drop in replacement of shaded pole motors

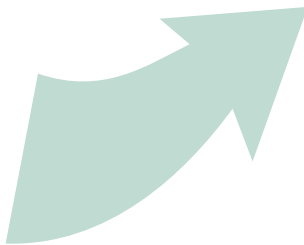
Our motors use the same mounting systems as shaded pole motors and are provided with a plug in connection for easy, fast replacement. They also fit the same fan blades and accessories as traditional shaded pole motors.

ECR fans are available in all standard refrigeration sizes and pitches.

ECR standard features make it easy to replace traditional shaded pole motors in all beverage merchandisers, with no need for costly adjustments.



8 inch axial fan (shaded pole motor)



Drop in replacement



8 inch ECR axial fan

⁶ For a one door beverage merchandiser, with estimated life of 8 years, two motors, and price of electricity 0.09\$/kWh.
⁷ For a one door beverage merchandiser using two ECR motors. Payback period calculation includes reduced compressor operation savings.

Wellington has made a strong commitment to providing standard and custom design solutions that will lower your financial costs while preserving key natural resources.

For information about our full line of products and our “Total Integration” custom design service, call our **toll free number 888 786 4153** or visit us on our website at **www.wdtl.com**.

USA

Wellington Drive Technologies US, Inc.
1407 Barclay Blvd
Buffalo Grove, IL 60089
USA
Phone: +1 (224) 588-8712
Toll Free: +1 (888) 786-4153
Fax: +1 (847) 786-4153
Email: sales@wdtl.com

MEXICO

Wellington Drive Technologies Mexico
PO Box 57
San Juan del Rio
Querétaro
Mexico 76800
Phone: +52 427 112 9101
Email: sales@wdtl.com

SINGAPORE

Wellington Drive Technologies Pte Ltd
39 Tampines Street 92
#4-00
Singapore 528883
Phone: +65 6373 7200
Fax: +65 6373 7201
Email: sales@wdtl.com

NEW ZEALAND

Wellington Drive Technologies Ltd
16-22 Omega Street
Albany, North Shore 0632
New Zealand
Phone: +64 (0) 9 414 6590
Fax: +64 (0) 9 414 6591
Email: info@wdtl.com

UNITED KINGDOM

Wellington Drive Technologies Ltd
Algores Way, Wisbech
Cambridgeshire, PE13 2TQ
United Kingdom
Phone: +44 (0) 1945 580 700
Fax: +44 (0) 1945 580 640
Email: sales@wdtl.com

THE NETHERLANDS

Wellington Technical Service Centre Europe
Luxemburgstraat 114
7559 NB Hengelo
The Netherlands
Phone: +31 (0) 74 291 9987
Fax: +31 (0) 74 291 5788
Email: sales@wdtl.com

ITALY

Wellington Italia Srl
Via Torino, 2
20123, Milan
Italy
Phone: +39 02 7254 6746
Fax: +39 02 7254 6412
Email: sales@wdtl.com

TURKEY

Wellington Motor Teknolojileri San Tic Ltd Sti
Bostanci Yolu Cad Keyap Sitesi, No:105
Yukari Dudullu, Umraniye 34775 Istanbul
Turkey
Phone: +90 (0) 216 420 1202
Fax: +90 (0) 216 420 1205
Email: sales@wdtl.com