

Energy Savings Solutions

Emerson Motor Company

8100 West Florissant Ave.
St. Louis, MO 63136

Phone: 877-600-3190

Fax: 314-595-8315

www.emersonmotors.com/MRO

Emerson Motor Company Facilities Maintenance Solutions

COMPETITIVE CROSS REFERENCE SEARCH CAPABILITIES

Over 50,000 cross references are available for popular EMERSON® and U.S. MOTORS® brands, both integral and fractional, for competitor or OEM catalog numbers and model numbers. The competitive search tool is available at: www.emersonmotors.com/MRO

EXTENSIVE MOTOR AVAILABILITY NETWORK

Worldwide network of distributors with stock availability of EMERSON fractional and U.S. MOTORS brand integral motors. Browse the list at www.emersonmotors.com/MRO

ENERGY SAVING SOLUTIONS

At Emerson, our goal is to assist our customers in understanding their energy saving opportunities and help reduce operating costs at their facility. To schedule an Energy Evaluation and Savings Estimate appointment, contact your Emerson representative or call 877-600-3190.

ONLINE MOTOR SPECIFICATIONS & TECHNICAL DATA

Easily access up to date information on every EMERSON motor. Find dimension prints, performance data, nameplate data, wiring diagrams, curves, renewal parts lists, installation and maintenance manuals, 3D models, and more. All are just a click away: www.emersonmotors.com/MRO

ONLINE CHAT

Get answers quickly to your technical or product questions through interactive on line chat service at www.emersonmotors.com/MRO

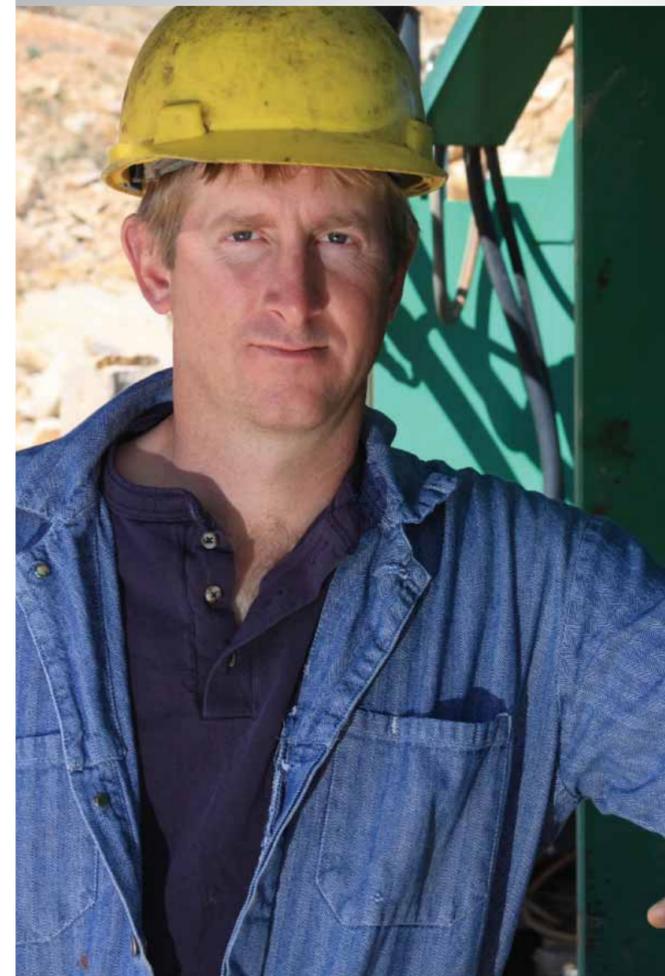
EXPERIENCE

For more than a century, Emerson has been manufacturing reliable, quality electric motors. We develop standard, as well as custom, solutions that enable our customers to lead their industry with advanced motor capabilities. We bring together technology and engineering to deliver the best solutions for our customers. Learn more at www.emersonmotors.com

PRODUCT SCOPE

From small fractional horsepower motors that drive fans and blowers to large integral horizontal and vertical motors that power large industrial machinery, we have the breadth of product to meet virtually any customer need, on any business scale. For more information, visit www.emersonmotors.com/MRO

MRO-MINING 9/08



Energy Independence and Security Act of 2007: Are You Ready?

On December 18, 2007, President Bush signed the new energy bill, the Energy Independence and Security Act of 2007, which sets motor efficiency standards which should result in less power consumption. While the law does not go into effect until December 2010, this brochure contains motors that already meet these new energy efficiency levels. So, to help you get started in planning your current and future motor needs, turn to Emerson.

The Energy Independence and Security Act of 2007 will move the current energy efficient 1 to 200 horsepower general purpose product to NEMA Premium® efficiency levels (NEMA MG1 12-12) beginning December 2010.

There are also nine new product categories impacted by the new Energy Independence and Security Act of 2007 (unless otherwise noted Open and Enclosed 2, 4, 6 pole, usable on 230/460 VAC). The motors in these categories will be required to meet the energy efficiency levels by December 18, 2010.

These include the following types of motors:

- | | |
|--|---|
| 1) U-Frame Motors | 7) Firepump Labeled Motors |
| 2) Design C Motors | 8) All Three Phase Motors with Voltages up to 600 volts other than 230/460 |
| 3) Footless Motors | |
| 4) 8 Pole Motors (900 RPM) | 9) Vertical Solid Shaft Normal Thrust Motors (tested in horizontal configuration) |
| 5) Close Coupled Pump Motors | |
| 6) HP's from 201 to 500 General Purpose Design B | |

The Energy Independence and Security Act of 2007 will also maintain the IEEE12 method B or CSA 390 test methods. Motors that are imported as a finished product or as a component of a piece of equipment will also be covered by this new act.

Motion Industries stock a wide variety of EMERSON® and US MOTORS® brand NEMA Premium® electric motors, including: Totally Enclosed Fan Cooled (TEFC) Hostile Duty; TEFC CORRO-DUTY®; TEFC 841 PLUS®; TEFC Cooling Tower Duty; and Open Dripproof (ODP). With Emerson's NEMA Premium® electric motors, you will be on your way to being READY to meet the requirements of the new energy law.



MINING & AGGREGATE

TOTALLY ENCLOSED FAN COOLED ELECTRIC MOTORS



Emerson Motor Company

8100 West Florissant Ave.
St. Louis, MO 63136

Phone: 877-600-3190

Fax: 314-595-8315

www.emersonmotors.com/MRO



The Emerson logo is a trademark and service mark of Emerson Electric Co.



EMERSON. CONSIDER IT SOLVED.

EMERSON. CONSIDER IT SOLVED.

EMERSON. CONSIDER IT SOLVED.

©Emerson Motor Company, 9/08; All Rights Reserved

©Emerson Motor Company, 7/08; All Rights Reserved

Emerson Motor Company offers a variety of options for mining and aggregate applications.

e-LINE® HIGH EFFICIENCY OPTION

e-LINE® Brand Totally Enclosed Fan Cooled Motors

- All Cast Iron Construction
- Energy Efficient
- Class F Insulation, Class B Temperature Rise at Full Load
- Vacuum Pressure Impregnation (VPI) Varnish System



Emerson's e-LINE® brand electric motors are designed to protect the internal components of the motor and help extend the life of your motor, keeping your conveyor running smoothly longer, even in the most severe environments, such as mining and aggregate.

e-LINE electric motors include a cast iron frame, end shield, fan cover guard and conduit box which help protect the internal components against rock damage. The zinc-coated hardware, stainless steel nameplate and chemical resistant paint help resist rust. The V-ring shaft with umbrella seals helps protect the internal components of the motor from the large amounts of dust.

And, even more importantly, e-LINE motors by Emerson feature the Vacuum Pressure Impregnated (VPI) Insulation System, something not commonly found in other manufacturers cast iron motors. Emerson's e-LINE motors are designed with VPI to help extend the life of the motor, allowing it to run longer and cooler even when a variable frequency drive is being used with the motor.

Available from 1 to 250HP, 230/460V and 575 in 2, 4 and 6 pole, with both footed and c-face footed options.

CORRO-DUTY® NEMA PREMIUM™ OPTION

CORRO-DUTY® Brand Totally Enclosed Fan Cooled Motors

- All Cast Iron Construction (Steel Frame & Fan Cover on 140 Frame)
- NEMA Premium™ Efficient
- Precision Balance (<0.08 In/Sec Vibration)
- Corrosion Resistant Mill & Chemical Duty Paint
- Oversized Conduit Box – 1 Size Larger than NEMA™ standard
- Class F Insulation, Class B Temperature Rise at Full Load
- Cast Iron Bearing Caps on 180 Frame and Larger



CORRO-DUTY® brand electric motors are designed for severe environments such as mining and aggregate. The added features of the CORRO-DUTY motor provide an even greater array of features to help protect and extend the life of the motor.

CORRO-DUTY electric motors are all cast iron — frame, end shield, fan cover and oversized conduit box — to help protect from rock chips and damage. The corrosion resistant mill and chemical duty paint help protect the motor exterior from rust and corrosion. The shaft slinger on the pulley helps protect the internal components from dust. The steel nameplate and zinc hardware protect against rust. The precision balance helps reduce vibration.

CORRO-DUTY motors meet NEMA Premium™ efficiency standards allowing for greater performance and help in saving energy costs.

Available from 1 to 200HP, 230/460V, 460V and 575V in 2, 4 and 6 pole options. Footed and c-face footed options are available.

841 PLUS® NEMA PREMIUM™ FULL-FEATURED OPTION

841 PLUS® Brand Totally Enclosed Fan Cooled Motors

- All Cast Iron Construction (Steel Frame & Fan Cover on 140 Frame)
- NEMA Premium™ Efficient
- Meets or Exceeds IEEE 841 Standard – 2001
- Cast Iron Bearing Caps on 180 Frame & Larger
- Corrosion Resistant Mill & Chemical Duty Paint
- Meets Vibration Requirements of GM7E-TA
- Class F Insulation, Class B Temperature Rise at Full Load
- Oversized Conduit Box – 1 Size Larger than NEMA™ standard
- 5 Year Limited Warranty*



Emerson's 841 PLUS® electric motors are designed to exceed the IEEE® 841 Standard (2001). These rugged motors are ideal for constant speed or inverter duty applications typically found in mining and aggregate industries.

The 841 PLUS motors are NEMA Premium™ efficient, which assists in minimizing operating temperatures and ultimately lowering costs. The motors include Inpro/Seal® VBXX® bearings on both ends, which provides IP55 protection, and helps prolong motor life by shielding bearings from contaminants such as dust and dirt. The motors include special shaft runouts of 0.0010 inches for motors up to 200HP. The motors are machined to foot flatness within 0.005-inch tolerance to help ensure easy installation and proper alignment.

All 841 PLUS® motors carry a five-year limited warranty* for sine wave power and a three-year limited warranty* on inverter duty applications.

Available from 1 to 400HP, 460V and 575V, in 2, 4 and 6 poles with footed and c-face footless options.

*For details, refer to: <http://www.usmotors.com/FL600/LimitedWarranty.pdf>