



# marathon™

Motors

AC & DC Motors

SB527



A Regal Brand

**REGAL**



# A COMPREHENSIVE RANGE OF HIGH QUALITY AC & DC MOTORS



## 48-445T FRAME HVAC & REFRIGERATION

- Built for the OEM and the replacement market
- Many designed-in features for easy installation
- Patented Voltage-Change-Device (VCD) for easy voltage selection
- Dripproof and totally enclosed constructions
- Many shaft lengths and diameters available with combination key/flat
- VFD suitable products in three phase platforms
- Robust performance and construction for reliable operation
- See Brochure SB525

## 48-56 FRAME FRACTIONAL

- Totally enclosed, Dripproof & Explosion Proof enclosures
- Rigid base, C-Face with rigid base and C-Face mountings available
- Stocked in both single and three phase
- Designs starting at 1/12 HP up to 3 HP
- Reduce inventory costs with innovative products like the Four-In-One, featuring a bolt-on removable rigid base, 1/4 through 10 HP
- See Brochure SB524

## 48-256T FRAME AGRICULTURAL

- Designed especially for the farmer or the OEM
- Extra-high starting torque designs: Chore Motor®, Crop Dryer, Auger Drive, Farm Duty, Centrifugal Fan and more
- Patented centrifugal Power Switch for extra starting power
- Manual reset overload thermal protection
- Fully gasketed design for additional protection
- See Brochure SB335

## 56-215T FRAME POWERWASH

- USDA-approved white epoxy paint
- Cast conduit box with stainless steel cover
- Internal corrosion resistant coatings on frame, base, endshields, rotor & stator
- Max Guard® insulation system
- Single phase motors have electronic encapsulated starting switch
- 100% stainless steel three phase designs available,
- 1/2 through 10 HP
- See Brochure SB563

## 56-508 FRAME PUMP

- JM/JP close coupled pump, vertical & horizontal mounts
- Vertical solid shaft P-Base
- UL Listed Fire Pump
- Dripproof, Totally Enclosed, Severe Duty, IEEE-841, & Explosion Proof enclosures
- EPat & NEMA Premium™ Efficiency designs available
- Jet Pump in single and three phase

## 56-449T FRAME EXPLOSION PROOF

- Broadest range of XP motors in the industry
- Single phase fractional to Severe Duty 449T frame
- Class I Group D or Class I Groups C & D, Class II Groups F & G
- 1.15 service factor
- UL Listed for use with ANY PWM DRIVE on the market
- Available in EPat & NEMA Premium™ Efficiency
- Severe Duty Features
- See Brochure SB536

## GLOBETROTTER ODP, TEFC AND J/JP

- ODP and TEFC up to 200HP
- 10:1 VT and 2:1 CT on ODP
- 10:1 VT and 10:1CT on TEFC
- Class F Insulation
- F1 assembly, reversible to F2
- UL Recognized, CSA Certified

## 143-449T FRAME XRI® SEVERE DUTY

- Premium efficient XRI® design
- 100% cast iron construction
- Internal and external epoxy coatings
- Brass drain and breather
- MAX GUARD® insulation system surpasses NEMA MG1, Part 31
- Meets IEEE45 USCG Marine Duty
- CSA Certified for Division 2 hazardous locations
- IEEE-841 meets IP56 & features special foot flatness, Inpro-Seal® bearing isolators and five year warranty
- See Brochure SB523

## NEMA 449 - IEC560 MEDIUM VOLTAGE

- 100 through 2500 HP
- Blue Chip XRI® Severe Duty features
- 100% Cast iron construction for reduced vibration
- Form-wound stator coils with Vacuum Pressure Impregnation (VPI) system
- Rotating shaft seals
- NEMA Design B torques
- 5000 Frame comes with multiple foothole drillings for easy retrofit
- See Brochure SB522

## 63-225M FRAME IEC GLOBETROTTER®

- Meets IEC 34 electrical standards and IEC 72 dimensions and tolerances
- Designed for 50/60 Hz operation
- IP55 Weatherproof enclosures
- Wye Start-Delta Run on 7.5 KW & higher
- Meets EPat and NRCan efficiencies
- Design N with NEMA Design B torques
- Meets IEEE45 and IEC 60092 requirements for use in onshore & offshore
- See Brochure SB537

## SyMAX® INDUSTRIAL PERMANENT MAGNET AC MOTOR

- Ultra Efficient™ (IE4 or higher)
- 100% cast iron frame construction
- Constant Torque over variable speed
- IP45 - IP56 rated enclosures
- Class H Max Guard Insulation System
- Three-year warranty
- See Brochure SB700A & SB744

## 56-449T FRAME INVERTER & VECTOR DUTY

- microMAX™ is a direct replacement for PMDC motors & delivers up to 1000:1 constant torque
- Black MAX® Plus provides 1000:1 constant torque, maximum performance & cost-effective construction
- Blue MAX® 2000 provides 2000:1 constant torque and cast iron construction
- MAX GUARD® insulation system exceeds NEMA
- MG 1-31 requirements & eliminates cable length restrictions
- See Brochure SB526

## APPLICATIONS



- Belted & Direct Drive Fans
- Vane Axial Fans
- Condenser & Centrifugal Fans
- Furnaces and Air Conditioners
- Exhaust Fans
- Blower Units
- Attic Fans

- Gear Reducers
- Pumps
- Machine Tools
- Fans and Blowers
- Material Handling
- Machine Tools
- Compressors
- Conveyors

- Poultry Feeders
- Silo Unloaders
- Crop Drying
- Compressors
- Conveyors
- Pumps
- Barn Cleaners
- Grain Stirrers

- Dairies
- Beverage Plants
- Food Processing
- Slaughter Houses
- Bakeries
- Pharmaceutical Plants
- Car Washes

- Centrifugal Pumps
- Hydraulic Pumps
- Water System Pumps
- Fire Pumps
- Turbine Pumps
- Vertical End Suction
- Propeller Pumps

- Fans and Blowers
- Pumps
- Compressors
- Gear Reducers
- Machine Tools
- Conveyors
- PWM Drives

- Pumps
- Gear Reducers
- Conveyors
- Compressors
- HVAC

- Refineries
- Food Processing
- Mines
- Foundries
- Chemical Plants
- Paper Making
- Saw Mills

- Mining
- Paper Making
- Metal Processing
- Chemical Plants
- Refineries
- Food Processing
- Foundries

- Machine Tools
- Textile Machinery
- Conveyors
- Pumps
- Blowers

- Extruders
- Metal Processing
- Pumps
- Conveyors
- Packaging

- Material handling
- Machine Tools
- Conveyors
- Cranes and Hoists
- Test Stands
- Textile Applications
- Extruders





# WORLD CLASS TEST FACILITIES

The Marathon National Voluntary Laboratory Accreditation Program (NVLAP) certified and UL/CSA Approved Laboratory permit our engineers to test motors from 1/10 to 2500 HP. Fifteen computer-controlled test stands provide the power and flexibility for testing vector drives at 1 RPM. Our advanced instrumentation is essential for CSA and UL approved tests. Besides IEEE 112B tests, a variety of optional tests such as harmonic content, torque ripple, vibration, sound, and corona inception can be provided to give the customer a complete picture of an excellent motor.

## WE PROVIDE IT ALL

Specialty designs, best quality, broadest product line.



Vertical Solid Shaft



Crusher Duty



Multi-Speed



Condenser Fan



Auger Drive



Oil Well Pumping



IEEE45 USCG  
Marine Duty



Automotive Duty



Brake Motors



Woodworking



Pedestal Fan



Dripproof  
Force Ventilated

**marathon**<sup>™</sup>  
Motors

[www.marathonelectric.com](http://www.marathonelectric.com)



## HISTORY OF RELIABILITY

Since 1913, the name Marathon Electric has been associated with highly reliable, low voltage electric motors from 1/12 through 1250 horsepower. Today, that history of conservative motor designs, coupled with the best technology, materials, and manufacturing techniques, ensures premium operation and long service life in our above NEMA motor offering.

The power of quality and innovation are combined in our Blue Chip XRI® Medium Voltage motor family. The Blue Chip XRI® Medium Voltage incorporates advanced design techniques that contribute to such benefits as size and weight reduction, and air flow improvements that keep motor operating temperatures low and efficiencies high. All motors over 1000 volts have form wound stator coils that are vacuum pressure impregnated in 100% solid epoxy resin, and are final coated with an epoxy ester for additional resistance to abrasion and build-up of contaminants. Computer controlled machine tools maintain the tight tolerance needed for precise fits, runouts, and air gaps.

Marathon's Blue Chip XRI® Medium Voltage motors are the right choice for applications demanding ruggedness and high dependability such as metal processing, paper making and mining.

## THE MARATHON ELECTRIC DIFFERENCE

We're a company that goes the extra distance.

- Leader in Inverter Duty Motor Technology
- Best Equipped Test Labs in North America
- Low Vibration and Conservative Designs
- One of the Industry's Best Warranties
- ISO 9001:2000 Certified



# marathon™



100 E. Randolph Street, PO Box 8003  
Wausau, WI 54401-8003  
PH: 715-675-3311

[www.marathonelectric.com](http://www.marathonelectric.com)

A Regal Brand

# REGAL

[www.regalbeloit.com](http://www.regalbeloit.com)