



*Motors for the Long Run!*

**High Quality AC & DC Motors**



Visit us at [www.marathonelectric.com](http://www.marathonelectric.com)



*Specialty Designs, Best Quality,  
Broadest Product Line!*

***We Provide It All!***



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

## HVAC



### 48-256T Frame

- Built for the OEM and the replacement market
- Many designed-in features for easy installation
- Patented Voltage-Change-Device (VCD) for easy voltage selection
- Weather resistant reversing plugs for quick change in rotation
- Many shaft lengths and diameters available with combination key/flat
- Easy-to-read carton label with identification photo
- See Brochure SB525

## Fractional



### 48-56 Frame

- 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

## Agricultural



### 48-256T Frame

- Designed especially for the farmer or the OEM
- Extra-high starting torque designs: Chore Motor<sup>®</sup>, 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

## Washdown PowerWash



### 56-215T Frame

- USDA-approved white epoxy paint
- Cast conduit box with stainless steel cover
- Internal corrosion resistant coatings on frame, base, endshields, rotor & stator
- MAX GUARD<sup>®</sup> insulation system
- Single phase motors have electronic encapsulated starting switch
- 100% stainless steel three phase designs available, 1/2 through 10 HP
- See Brochure SB522



### Applications...

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

### Applications...

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



### Applications...

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

### Applications...

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



# AC & DC Motors For Your

## Pump



### 56-508 Frame

- 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
- EPAct & NEMA Premium™ Efficiency designs available
- Jet Pump in single and three phase
- Pool/Square flange available from 1/2 through 2 HP

## Explosion Proof



### 56-449T Frame

- 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 EPAct & NEMA Premium™ Efficiency
- Severe Duty Features
- See Brochure SB536

## XRI® Premium Efficient



### 143-449T Frame

- Our XRI® design exceeds EPAct & NRCan efficiency standards
- Offers high efficiency levels that meet NEMA Premium™
- Receive an eXtra Return on your energy investment
- Built for high cycle or long run-time applications
- Dripproof, Totally Enclosed & Explosion Proof enclosures
- XRI® Totally Enclosed delivers 20:1 constant torque on variable frequency drive
- Comes with a full three year warranty
- See Brochure SB523

## XRI® Severe Duty



### 143-449T Frame

- 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



### Applications...

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



### Applications...

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

### Applications...

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



### Applications...

- Pumps
- Gear Reducers
- Conveyors
- Compressors
- HVAC



# Toughest Applications

## Medium Voltage



### 449T-5013 Frame

- 100 through 800 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, Inpro® Smart Rings on each end
- NEMA Design B torques
- 5000 Frame comes with multiple foothole drillings for easy retrofit
- See Brochure SB530

## IEC Globetrotter®



### 63-225M Frame

- 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 EPCan and NRCan efficiencies
- Design N with NEMA Design B torques
- Meets IEEE45 and IEC 60092 requirements for use in onshore & offshore
- See Brochure SB537

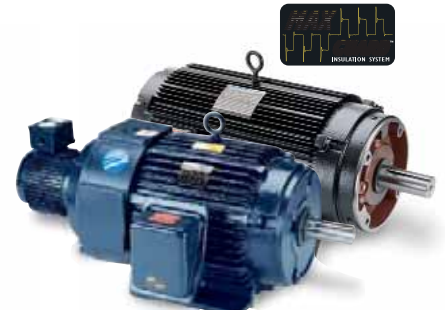
## Permanent Magnet DC



### 56-182T Frame

- Performance matched to use with SCR or PWM DC controllers
- Low voltage 12 & 24 volt, or 90 & 180 volt available
- Delivers constant torque over 20:1 speed range
- Unique brush holder design provides easy access to brushes for replacement
- Available in TENV, TEFC, Explosion Proof, and Washdown Duty enclosures
- Two-year warranty

## Inverter & Vector Duty



### 56-449T Frame

- microMAX™ is a direct replacement for PMDC motors & delivers up to 1000:1 constant torque
- BLACK MAX® 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...

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

### Applications...

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



### Applications...

- Extruders
- Metal Processing
- Pumps
- Conveyors
- Packaging Equipment

### Applications...

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



# 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
- Members of:   



## World Class Test Facilities

Marathon Electric's National Voluntary Laboratory Accreditation Program (NVLAP) accredited and UL/CSA Approved Laboratory permit our engineers to test motors from 1/10 to 1000 HP and generators through 2.5 MW. Fifteen computer-controlled test stands provide the power and flexibility for testing vector drives at 1 RPM, wind generators under load, or high speed compressor motors at 5000 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.

For additional information about our complete line of AC & DC motors, contact:



Marathon Electric Manufacturing Corporation

100 East Randolph St. • P.O. Box 8003 • Wausau, Wisconsin 54402

Call: (715) 675-3311 • Fax: (715) 675-8030 • [www.marathonelectric.com](http://www.marathonelectric.com)

SB527-6158M/7.5M/4-8/SK/TG

