

marathon™ Motors

AC & DC Motors

SB527



A Regal Brand

REGAL

A COMPREHENSIVE RANGE OF HIGH QUALITY AC & DC MOTORS































IEC GLOBETROTTER®

Meets IEC 34 electrical

standards and IEC 72

dimensions and

tolerances





48-445T FRAME **HVAC & REFRIGERATION**

- Built for the OEM and the replacement market
- Many designedin 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
- See Brochure SB525

48-56 FRAME FRACTIONAL

Totally enclosed, Dripproof & Explosion Proof enclosures

Reduce inventory costs

like the Four-In-One,

featuring a bolt-on

1/4 through 10 HP

See Brochure SB524

removable rigid base,

with innovative products

- 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
- Manual reset overload thermal protection
- Fully gasketed design for additional protection

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
- Patented centrifugal Power Switch for extra starting power
- 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
- EPAct & 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 • 10:1 VT and 2:1 CT on Severe Duty 449T frame Class I Group D or Class
- I Groups C & D, Class II TEFC
- 1.15 service factor
- UL Listed for use with ANY PWM DRIVE on
- the market Available in EPAct & NEMA Premium™

Efficiency

Group's F & G

- Severe Duty Features
- See Brochure SB536

GLOBETROTTER ODP, TEFC AND J/JP

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

143-449T FRAME XRI® SEVERE DUTY

- Premium efficient XRI®
- 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

with Vacuum Pressure

Impregnation (VPI)

Rotating shaft seals

5000 Frame comes

See Brochure SB522

with multiple foothole

drillings for easy retrofit

system

- Designed for 50/60 Hz construction for reduced operation vibration IP55 Weatherproof Form-wound stator coils
 - enclosures Wye Start-Delta Run on 7.5 KW & higher
- Meets EPAct and NRCan efficiencies NEMA Design B torques
 - 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

- Constant Torque over variable speed
- enclosures
- Insulation System
- Three-year warranty See Brochure SB700A &

Metal Processing

Pumps

Conveyors

Packaging

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 & costeffective construction
- provides 2000:1 constant torque and cast iron construction
- 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

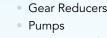
Furnaces and Air

Conditioners

- Exhaust Fans
- Attic Fans



- Machine Tools
- Material Handling
- Compressors
- Blower Units



Machine Tools

- Fans and Blowers
- Conveyors





- Crop Drying
- Conveyors
- Barn Cleaners
- Silo Unloaders
- Compressors
- Pumps
- Grain Stirrers
- Food Processing Slaughter Houses
 - Bakeries Pharmaceutical Plants
- Dairies Beverage Plants

Car Washes

- Fire Pumps
- Centrifugal Pumps Hydraulic Pumps Water System Pumps
 - Turbine Pumps Vertical End Suction
- Fans and Blowers Pumps
- Compressors Gear Reducers

Machine Tools

Conveyors Propeller Pumps



- Pumps
- Conveyors
- PWM Drives



- Gear Reducers
- Compressors HVAC



- Refineries
- Food Processing Mines
- Foundries Chemical Plants

Paper Making

Saw Mills

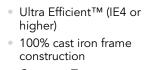


- Mining
- Paper Making Metal Processing
- Refineries Food Processing
- Foundries

Chemical Plants



- Machine Tools Extruders
- Textile Machinery Conveyors
- Pumps Blowers



- IP45 IP56 rated Blue MAX® 2000 Class H Max Guard
 - MAX GUARD® insulation





Conveyors

Test Stands

Extruders



- Material handling Machine Tools
- Cranes and Hoists
 - Textile Applications



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





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™



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