

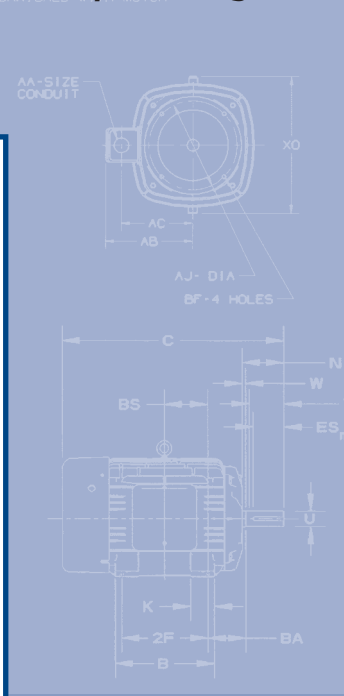
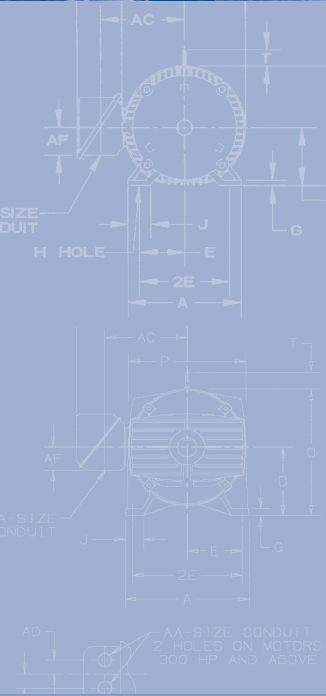


# Product Data Sheet

## Horizontal A.C. Motors

### World Motors®

General and Definite Purpose Designs



- Open Dripproof and Totally Enclosed Fan Cooled
- Energy Efficient per NEMA (2003) MG1, 12-10
- 56-440T Frames, 1 through 400 Horsepower
- 3600 - 900 rpm 2 through 8 pole
- Both 60 hertz and 50 hertz operation
- 250 Frame and larger ratings suitable for wye-start delta run or across-the-line starting
- CE Mark on nameplate
- Meets EPACT 92 (USA), NOM 74 (Mexico), and CSA C390 (Canada) efficiency levels
- ALLGUARD® Motor Quality System



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## Product Overview

U.S. Motors' **World Motor**® is designed for the global marketplace. It provides an economical method of meeting efficiency requirements such as EPACT '92 for the United States, NOM 74 for Mexico and CSA C390 for Canada. The **World Motor**, a general purpose motor that meets standard NEMA requirements on 60 hertz operation including 40°C ambient, design B, class B temperature rise at full load and usable up to 3300 ft altitude.

The **World Motor** is available in open dripproof or totally enclosed fan cooled designs. Two types of totally enclosed fan cooled motors are available: the Unimount® and the Hostile Duty. On 180 frame and larger, the Unimount frame is constructed from extruded aluminum and the Hostile Duty models have rugged cast iron frames and end bells. The Unimount design for 56 and 140 frames includes rolled steel shells, aluminum end bells and removable bases. The hostile duty 56 and 140 frames also features removable base, with cast iron end bells.

Designed for flexibility, the 230/460 or 460 volt 60 hertz motors can be used on 190/380 or 380 volt 50 Hz respectively. This 50/60 hertz operation is clearly defined on the dual frequency World Motor nameplate. The nameplate also displays the "CE" mark verifying certification to the European community's low voltage and safety directive.

The **World Motor** is constructed with all copper windings and low loss stator laminations to optimize efficiency. This product meets the federally legislated

efficiency levels mandated effective October 24, 1997, in the USA. In addition, all conduit boxes are diagonally split and oversized from NEMA™ standards for easier connection. The standard F1 position may be easily modified to F2 mounting on all aluminum or cast iron frames, 180 and above.



To modify the stock product offerings, we offer several stock conversion options including: C-face, D-flange, canopy cap/drip cover, and strip heater. In addition we offer a wide variety of features on special factory orders. For a more comprehensive description of our new line of World Motors please contact your U.S. Motors sales representative.



# Product Features



	Open Dripproof	Open Dripproof	TEFC Unimount	TEFC Hostile Duty	TEFC All CI
Type	"FD"	"FR"	"FUT"	"FCT"	"FCTC"
Frame Material	Steel	Cast Iron	Aluminum (56-140 Rolled Steel)	Cast Iron (140 Rolled Steel)	Cast Iron
End Shield Material	56-250 Aluminum 280-320 Cast Iron	Cast Iron	Aluminum	Cast Iron	CI
Paint	Corro-Duty (250 hour salt spray)	Corro-Duty (250 hour salt spray)	Corro-Duty (250 hour salt spray)	Corro-Duty (250 hour salt spray)	Corro-Duty (250 hour salt spray)
Horsepower Range	1/3 thru 60 HP	30 thru 400 HP	1 thru 30 HP	1 thru 200 HP	1 thru 200 HP
Frame Sizes	56 thru 320T Frame	360 thru 449T Frame	56 thru 286T Frame	140 thru 447T Frame	140 thru 447T Frame
CE Mark on Nameplate	Yes	Yes	Yes	Yes	Yes
Phase	Three Phase	Three Phase	Three Phase	Three Phase	Three Phase
Speeds	60Hz 50 Hz	3600 - 900 rpm 3000 - 750 rpm	3600 - 900 rpm 3000 - 750 rpm	3600 - 900 rpm 3000 - 750 rpm	3600 - 900 rpm 3000 - 750 rpm
Voltage	60 Hz 50 Hz	200, 208 -230/460 460, 575 Volt 190/380, 380 Volt	200, 208 -230/460 460, 575 Volt 190/380, 380 Volt	200, 208 -230/460 460, 575 Volt 190/380, 380 Volt	200, 208 -230/460 460, 575 Volt 190/380, 380 Volt
Hertz		50/60 hertz on 230/ 460 Volt & 460 Volt only, 60 Hz on 200 & 575 Volt	50/60 hertz on 230/ 460 Volt & 460 Volt only, 60 Hz on 200 & 575 Volt	50/60 hertz on 230/ 460 Volt & 460 Volt only, 60 Hz on 200 & 575 Volt	50/60 hertz on 230/ 460 Volt & 460 Volt only, 60 Hz on 200 & 575 Volt
Service Factor	1.15 on 60 Hz 1.0 on 50 Hz	1.15 on 60 Hz 1.0 on 50 Hz	1.25 on 60 Hz 1.0 on 50 Hz	1.15 on 60 Hz 1.0 on 50 Hz	1.15 on 60 Hz 1.0 on 50 Hz
Starting Method					
Across-the-line	56-360T	360-449T	56-280T	140-447T	140-447T
Wye-Delta	250-360T	360-449T	250-280T	250-447T	250-447T
Part Winding Start*	56-360T	360-449T	56-280T	140-447T	140-447T
Bearing type	Sealed 56-140T Doubled shielded 180-320T	Double shielded 360T Open 400-440T	Sealed 56-140T Double shielded 180-280T	Double shielded 140-360T Open 400-440T	Double shielded 140-360T Open 400-440T
Regreasing Provisions	Yes 180 Frame and larger	Yes	Shaft End	250 Frame and larger	250 Frame and larger

\*Part Winding Start on lower voltage of dual voltage motors through 100HP.



# Complete Energy Efficient Product Line

- **General Purpose**
  - TEFC Unimount
  - TEFC Hostile Duty
  - TEFC All Cast Iron
  - ODP Open Dripproof
  - TEFC Explosionproof \* Motor types may not include all World Motor features
- **Special Application**
  - Fire Pump UL Approved \* Motor types may not include all World Motor features
  - ODP CCP Close Coupled Pump
  - IEC \* Motor types may not include all World Motor features

## Meets North American Efficiency Requirements

**USA - 1997 Federal Efficiency Levels - EPACT 92**  
**Mexico - NOM 74**                      **Canada - CSA C390**  
**Efficiency per NEMA MG1, 12-10**

## Meets International Efficiency Requirements

**50 and 60 hertz operation**  
**Wye-Delta or Across-the-Line Start on**  
**250 Frame or larger**

Emerson Motor Technologies, a global leader in the design and manufacture of electrical motors, provides a complete line of general and special purpose electric motors from 1/200 through 4,000 horsepower. Brands such as Emerson, Doerr, U.S. Electrical Motors, Hurst, and Switch Reluctance Drives, allow Emerson Motor Technologies to support a wide variety of applications including commercial and industrial, appliance, hermetic, automotive, and HVAC. For more information about Emerson Motor Technologies visit [www.emersonmotors.com](http://www.emersonmotors.com).

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