

General Purpose Motors

Horsepower: 1 — 500 HP

Frame Sizes: 143 — 5811

Phase: Three Phase

RPM: 3,600, 1,800, 1,200, or 900 RPM

Voltage:

- 200
- 208-230-460
- 230/460
- 460
- 575

Enclosure:

- Open Drip Proof (ODP)
- Totally Enclosed, Fan Cooled (TEFC)

Service Factor: 1.15 SF or greater

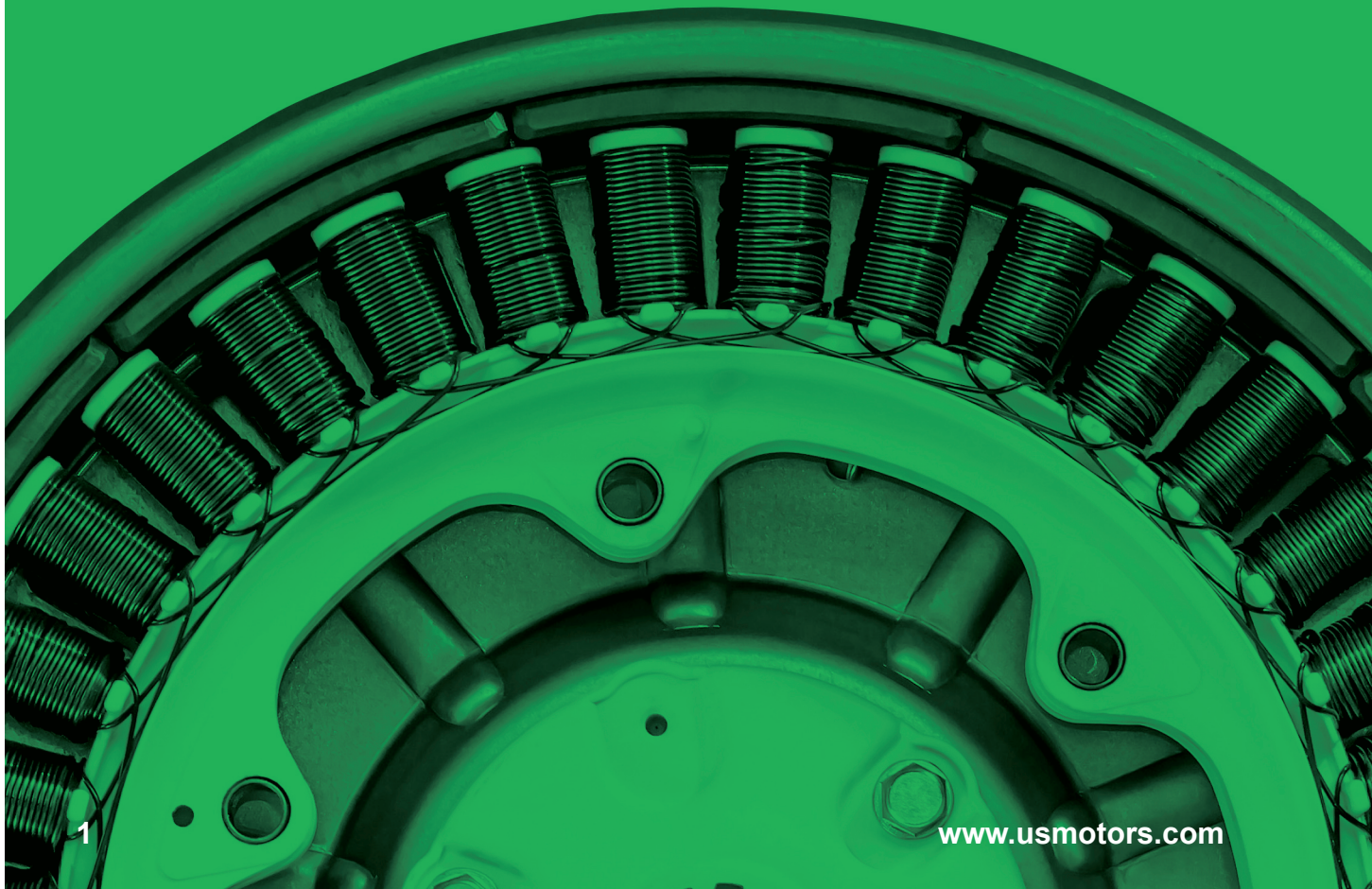
Insulation: Class B or F

Efficiency: Premium Efficient, NEMA®
Premium Efficient or EPA^{act}

Agency: UL® Recognized and CSA® Certified

WORLD MOTOR® Features:

- Both 60 Hz and 50 Hz operations (without derating motor)
- 250 Frame and larger ratings suitable for wye-start delta run or across-the-line starting



World Motor®

Cast Iron, General Purpose, Totally Enclosed
Fan Cooled, Horizontal AC Motors

Specifications

Horsepower: 1 – 300 HP

Speeds: 3600, 1800, 1200 and 900 RPM

Design Voltages: 230/460, 460, 575 Volts

Insulation: Totally Enclosed Fan Cooled (TEFC)

Industry Standard: NEMA or IEC

WorldMotor®

Product Overview

World Motor is a line of horizontal, cast iron, TEFC motors in 0.5 to 250 kW in both NEMA and IEC configurations. The World Motor family includes U.S. MOTORS® brand HOSTILE DUTY™, CORRO-DUTY®, 841 PLUS® and INVERTER DUTY™ motors.

This product line is built to withstand a variety of severe duty applications. These motors are rated Class B rise at 1.0 service factor and Class F rise at 1.15 service factor with full Class F or better insulating materials.

Product Line Overview

- Designed for severe environments
- External corrosion resistant mill and chemical duty paint
- Oxide primer coating on bracket and frame surfaces
- 0.08IPS peak vibration maximum, 0.05IPS for 841 PLUS
- Division 2 rating (Class I, Group A, B, C, D)
- Non-braided, no wicking leads with a compression type ground lug in the conduit box
- Re-greasable bearings with a standard of L-10 bearing life of 30,000 hours or more based on NEMA belting loads
- 100% solid polyester varnish on wound stator and rotor core
- Field convertible to F1 or F2 assembly position or top mount (F0/F3) assembly position
- Suitable for shaft up or shaft down mounting
- Stainless steel nameplate and hardware to allow for use in hostile and severe environments
- Conduit boxes are larger than NEMA standard, diagonally split and rotatable in 90 degree increments



HOSTILE DUTY™



CORRO-DUTY®



841 PLUS®



INVERTER DUTY™

Product Line Overview *continued*

New Features:

- True cast iron 140 frame now available (Previous offering was rolled steel or cast frame with bolt on base)
- 18.5" 449 through 300HP (previous offering was expensive Titan 449 based on 21" platform)
- Top mount conduit box mounting configuration

Features	Product line					
	HOSTILE DUTY	CORRO-DUTY	841 PLUS	Inverter Duty HOSTILE DUTY	HOSTILE DUTY IEC	841 PLUS IEC
Drains	Plastic	Brass	Brass	Plastic	Plastic	Brass
Regreasable Bearings	"250 Frame and Above"	Yes	Yes	"250 Frame and Above"	"250 Frame and Above"	Yes
Bearing Caps	"400 Frame and Above"	Yes	Yes	"400 Frame and Above"	"400 Frame and Above"	Yes
Frame Material	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Fan Cover Material	Steel	Cast Iron	Cast Iron	Steel	Steel	Cast Iron
Conduit Box Material	Steel	Cast Iron	Cast Iron	Steel	Cast iron	Cast Iron
Terminal Board	No	No	No	No	Yes	Yes
Inverter Usage	Suitable	Suitable	Inverter Duty	Inverter Duty	Suitable	Inverter Duty
Grounding	Stud in C/Box	Lug in C/Box	"Lug in C/Box and External"	Stud in C/Box	Lug in C/Box	"Lug in C/Box and External"
Shaft Grounding	No	No	No	Yes	No	No
Bearing Protection	Slinger	V-Ring + Slinger	Inpro Seal	Slinger	V-Ring + Slinger	Inpro Seal
Epoxy coated rotor	No	Yes	Yes	No	No	Yes
Epoxy External Paint	Yes	Yes	Yes	Yes	Yes	Yes
Voltage Offerings	Dual	Dual	Single	Dual	Dual	Single
Standard Div 2 Ratings	Division 2	Division 2	Division 2	None	Zone 2	Zone 2
Standard Construction	F1/F2	F1/F2	F1/F2	F1/F2	F0	F0
Hardware	Grade 5	Grade 5	Grade 5	Grade 5	Grade 5	Grade 5
Dual Drilled Feet	Yes	Yes	Yes	Yes	Yes	Yes

Options and Accessories

Custom design options available:

- Roller bearings
- Horizontal or vertical mounting
- C-Flange and D-Flange
- B5 and B14 IEC Flanges
- Special voltages
- High altitude or ambient
- Special shafts
- Shaft grounding
- Oil mist lubrication
- Thermal and Bearing (320 and above) protection
- Terminal Boards
- And more

Stock Motors

- 1 – 300 HP
- 2, 4, 6 pole designs
- 200, 230/460, 460 and 575 Volts
- NEMA 140 to 449 frames
- IEC 90 to 280 frames

Custom Motors

- 1 – 300 HP
- 2, 4, 6, 8 pole designs
- Special Voltage
- NEMA and IEC Frame Motors
- F1, F2, or F3/0 Mounting

† All marks shown within this document are properties of their respective owners.

For more information about the U.S. MOTORS brand, visit www.usmotors.com.

Nidec Motor Corporation. © 2019; All Rights Reserved. U.S. MOTORS® is a registered trademark of Nidec Motor Corporation.
Nidec Motor Corporation trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.