Full Line Product Overview

Industrial Motors and Systems



HVAC MOTORS

GENERAL PURPOSE MOTORS

DEFINITE PURPOSE MOTORS

SPECIAL PURPOSE MOTORS



General Purpose Industrial Motors

Three Phase, TEFC, Hostile Duty

- 1 HP through 350 HP
- · 3600, 1800, 1200 and 900 RPM
- 143 through 449 frame
- Energy and NEMA Premium^{®†} efficient
- · Cast iron frame and brackets
- Ball and roller bearing options

Three Phase, TEFC, CORRO-DUTY®

- 1 HP through 400 HP
- · 3600, 1800 and 1200 RPM
- 143 through 447 frame
- · All cast iron construction
- NEMA Premium^{®†} efficient

Three Phase, TEFC, 841 Plus®

- 1 HP through 400 HP
- 3600, 1800 and 1200 RPM
- 143 through 447 frame
- VBXX^{®†} bearing isolators by Inpro/Seal^{®†} helps protect bearings
- Meets IEEE^{®†} 841 GM7E-TA specifications
- Five-year limited warranty*
- NEMA Premium^{®†} efficient

Hazardous Location

- Single and three phase, TEFC
- 1/4 HP through 150 HP
- 3600, 1800, 1200 and 900 RPM
- 56 through 445 frame
- · Energy and premium efficient
- Class I Group D; Class I, Groups C and D, and Class II, Groups E, F, and G

Three Phase, TEFC, UNIMOUNT®

- 1/4 HP through 30 HP
- 3600, 1800, 1200 and 900 RPM
- 56 through 286 frame
- Energy and NEMA Premium^{®†} efficient
- · C-face, footed and footless and removable base

†All marks shown within this document are properties of their respective owners. *For details, refer to: www.usmotors.com





NEMA

Three Phase, ODP

- 1/4 HP through 400 HP
- 3600, 1800, 1200 and 900 RPM
- 48 through 449 frame
- Energy and NEMA Premium^{®†} efficient



C-Face: ODP, TEFC and Hazardous Location

- Single Phase, Split Phase and Capacitor Start
- Three Phase, footed and footless options
- 1/12 HP through 60 HP
- 3600, 1800 and 1200 RPM
- 56 through 326 frame
- · Standard, Energy and Premium Efficient



NEMA Premium

Single Phase, Split Phase, ODP and TEFC

- 1/12 HP through 3/4 HP
- 3600, 1800, 1200 and 900 RPM
- 48 through 56 frame
- · Rigid welded and cradle bases
- · Single and two speed options
- C-face footed and footless
- Automatic or manual reset thermal overload protector options

Single Phase, Capacitor Start, ODP and TEFC

- 1/8 HP through 10 HP
- 3600, 1800 and 1200 RPM
- 48 through 215 frame
- · Rigid welded and cradle bases
- · C-face footed and footless
- · Automatic or manual reset thermal overload protector options

Titan® Horizontal

- Three phase, ODP, WPI, WPII, TEFC and Hazardous Location
- 150 HP through 4000 HP
- 3600, 1800, 1200, 900, 720 and 600 RPM
- · 449 through 9608 frame
- 460 through 6600 volts
- · Ball or sleeve bearings available



The U.S. Motors® brand NEMA Premium®† line of high performance commercial and industrial motors is designed to help industry reduce energy consumption and comply with EISA regulations. This line features upgraded open dripproof and totally enclosed motors that meet or exceed NEMA Premium®† requirements.

Definite Purpose Motors

Vector Duty

- Three phase, TENV and TEBC
- 1 HP through 15 HP (TENV)
- 1 HP through 300 HP (TEBC)
- 143 through 449 frame
- 0-1800 RPM
- Constant torque near zero RPM
- Constant Torque



Inverter Duty

- · Three phase, ODP and TEFC
- 1 HP through 200 HP
- 3600, 1800 and 1200 RPM
- 143 through 447 frame
- Meets NEMA®† MG1 Part 31 requirements for inverter duty

ents

ACCU-Torg™ 2000:1

Hot Water Circulator Pump

- · Single and three phase, ODP
- 1/12 HP through 1-1/2 HP
- 1800 RPM
- 48 and 56 frame
- Direct replacement motor for B&G^{®†} (Bell & Gossett), Taco^{®†} and Thrush^{™†} brand circulator pumps

E G

Carbonator Pump

- Single phase, ODP
- 1/4 HP through 1/2 HP
- 1800 RPM
- 48 frame

Air Compressor

- · Single phase, ODP
- 1/2 HP through 5 HP
- 3600 RPM
- 56, 143 and 184 frame
- · High breakdown torque

Gate and Door Motors

- · Single and Three phase, ODP and TEFC
- 1/3 HP through 1 HP
- 1800 RPM
- 56 and 56C frames

Brake Motor

- · Three Phase, TEFC with Brake Added
- 1/3 HP through 20 HP
- 1800 and 1200 RPM
- 56 through 256 frame
- · Rigid base, C-face, footed and footless



Farm Duty

- · Single and three phase, TEFC
- 1/8 HP through 10 HP
- · 3600 and 1800 RPM
- 56 through 215 frame
- · High torque or extra high torque

Automotive Duty, U-frame

- · Three phase, TEFC
- 1/4 HP through 300 HP
- 3600, 1800, 1200 and 900 RPM
- 56 through 5008 frame
- Meets General Motors^{®†} GM-7EQ & GM-7EH Ford^{®†} EM1, and Chrysler^{®†} NPEM-105 spec

Fire Pump Motor

- · Three phase, ODP
- 7-1/2 HP through 250 HP
- · 3600 and 1800 RPM
- 184 through 445 frame
- UL® listed for fire pump application
- Available in horizontal frame and vertical JP close couple pumps

Commercial and Residential Water System Pumps

- · Single and three phase, ODP and TEFC
- 1/3 HP through 3 HP
- 3600 and 1800 RPM
- 48 and 56 frame
- · C-Face, square flange
- · Footed and footless

Pool and Spa Motor

- · Single and three phase, ODP
- 1/2 HP through 5 HP
- 3600 RPM
- 48 and 56 frame
- · Thru-bolt, c-face and square flange
- UL®† 1081, 1795 and 1563 design

ECOTECH EZ™ Variable Speed Motor and Control

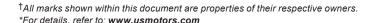
- 6.5" Frame Diameter; 56J C-Face or 56Y Square Flange frame
- 3 HP, Variable RPM; Category J
- Freeze Sensor
- Fully integrated motor control

2EZ™ Speed Motor and Control

- 6.5" Frame Diameter; 56J C-Face or Square Flange
- 3/4 to 2 HP; 3450/1725 RPM
- Freeze Sensor
- · Fully integrated motor control









Special Purpose Products

Vertical Pump Motors

- Three phase, WPI, WPII, TEFC and **Hazardous Location**
- 3 HP through 4000 HP
- 3600, 1800, 1200, 900, 720, 600 and 514 RPM
- 182 though 6810 frame
- Designed for high or normal thrust
- · Available in vertical hollowshaft and vertical solid shaft

Close Coupled Pump

- Single and three phase, ODP, TEFC and Hazardous Location
- 1 HP through 60 HP
- 3600 and 1800 RPM
- 143 through 326 frame
- · JM and JP shafts available
- Energy Efficient

Elevator Duty

- Single and three phase
- Submersible and dry hydraulic
- 3 HP through 75 HP
- 3600, 1800 and 1200 RPM
- Z and L32 flange mounting

Cooling Tower

- · Three phase, TEFC and TEAO
- 2 HP through 100 HP
- 1800, 1200, 1800/900 and 1200/600 RPM
- 145 through 447 frame
- · Single speed and two speed
- NEMA Premium^{®†}/inverter duty
- Replacement for Baltimore Aircoil Company,^{®†} Evapco^{®†} and SPX Cooling Technologies (Marley®1)

Painted Washdown

- · Single and three phase, TEFC
- 1/2 HP through 10 HP
- 3450, 1725 and 1150 RPM
- 56 through 215 frame
- Foot mounted, c-face footed and footless
- Compliant with EISA Standards

Paint Free Washdown

- Three phase, TENV
- 1/2 HP through 10 HP
- 1725 RPM
- · 56HC through 145TC frame
- VBX^{®†} bearing isolators by Inpro/Seal^{®†}
- Inverter Duty
- Compliant with EISA Standards

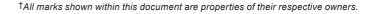
Stainless Steel Washdown

- Three phase, TENV and TEFC
- 1/2 HP through 2 HP
- 1750 RPM
- · 56HC through 145TC frame
- · All stainless steel construction
- Rust inhibitor on stator and rotor
- · Compliant with EISA Standards

Varidyne® 2 Variable Frequency Drive

- · Electrical adjustable frequency drive
- 1 to 200 HP (0.75 to 132 kW)
- Open Loop Vector Control: Speed or Torque
- · 3k Hz to 18k Hz Switching Frequency Range
- IP20 NEMA-1®† Enclosure





All high performance motors carry a nameplate including a NEMA Premium® trademark and European IE efficiency marks, providing a clear means for both users and OEM's to determine global regulatory compliance for their application. In addition to a full line of horizontal motors, the U.S. Motors® line of vertical motors will be available at premium efficiency levels to address customer requirements.

U.S. Motors® is a registered trademark of Nidec Motor Corporation. For more information about the U.S. Motors brand visit www.nidec-motor.com or www.usmotors.com.





HVAC Product Line Overview

MOJAVE® Series Condenser Fans

- 1 and 2 Speeds
- 1/4 HP through 3/4 HP
- Sleeve Bearings
- 70° Ambient Design



RESCUE® Motors

· Replaces a variety of different HP applications

Gas or Electric Furnace motors

- 1/2 to 1/6 HP or 3/4 to 1/5 HP
- 1075 RPM, 48 Frame

Condenser Fan Motors

- 1/3 to 1/6 HP or 1/2 to 1/5 HP
- 1075 RPM, 48 Frame



Condenser Fans

- Single and three phase, OAO and TEAO
- 1/10 HP through 2 HP
- 1725, 1625, 1550, 1075 and 825 RPM
- 48 and 56 frame
- Single and two speed



Fan and Blower

- · Single phase, ODP, OAO and TEAO
- 1/6 HP through 1-1/2 HP
- 3450, 1725, 1075 and 825 RPM
- · Single, two, three and four speed
- · Belt drive and direct drive



Evaporative Cooler

- Single phase, ODP
- 1/3 HP through 1 HP
- 1725 RPM
- 56 frame
- Single and two speed
- · Corrosion resistant rotor core and actuator assembly

Unit Heater

- · Single phase, TEAO
- 1/15 HP through 3/4 HP
- 1550 and 1075 RPM
- 48 and 56 frame
- Cradle and stud mount

Air Circulator Motors

- · Single Phase, OAO and TEAO
- 1/4 through 1/2 HP
- 1800, 1200, 1100, 1075 and 900 RPM
- 48 Frame
- · Single and two speed options
- Non-oscillating



Room Air Conditioners

- · Single phase, OAO and TEAO
- 1/10 HP through 3/4 HP
- 1725 and 1075 RPM
- 42 and 48 frame
- · Single, two, three, four and five speed
- Automatic reset thermal overload protector

Package Terminal A/C Heat Pump

- · Single phase, OAO
- 1/30 HP through 3/4 HP
- 1625, 1050, 1100 and 925 RPM
- 5.0", 5.6" and 6.3" diameter
- · Single, two, three and four speed



Oil Burner

- · Single phase, Totally enclosed when mounted
- 1/8 HP through 1 HP
- 3450 and 1725 RPM
- 48 and 56 frame
- Direct OEM replacement for Beckett,^{®†} Carlin,^{®†}
 Ducane^{®†} and Wayne^{®†} Home Oil Burner Systems

PEP® High Efficiency Condenser Fan Motor

- 76% efficient Single Phase PSC
- Up to 1/2 HP in 1075 & 825 RPM
- 48 Frame, TEAO, Ball Bearing
- 70°C/158°F, 50/60 Hz Rated



RESCUE® EcoTech High Efficiency Direct Drive Blower

- Drop in replacement for PSC Direct Drive Commercial and Residential Air Handlers and Furnaces
- 1/4 HP through 1 HP
- 1075 RPM, 48 Frame



RESCUE® 3.3 Refrigeration Evaporator Motors

- OAO and TEAO
- Dual cord for OEM connection
- Reversible PSC designs
- · Reversibility reduces SKUs to stock



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

eBusiness Solutions

State-of-the-art eBusiness systems that offer real-time solutions. Whether you need to check stock availability or need detailed specifications, you can access online information anytime, anywhere.

MOTORBOSS® Product Information Resource

24/7, 365 days a year availability. This easy-to-use system provides you real-time answers quickly. For more information, go to **www.motorboss.com**.

eCatalog

Using eCatalog makes it easier and faster than ever to find the right motor to meet your needs. eCatalog provides details on all U.S. Motors® brand stock motor ratings. For more information, go to www.usmotors.com/default_ecatalog.htm.

On-line Motor Cross Reference Library

Having trouble finding a replacement motor for an OEM, competitor model or catalog number? The online cross reference tool has more than 50,000 cross references to some of the most popular part numbers. Log on today to find a replacement motor at www.usmotors.com/default_ecatalog.htm.

MOTORPRO® Training

MOTORPRO® is a self-paced, interactive online electric motor training tool. After you complete MOTORPRO training, we will send you a certificate of completion. Sign on today at **www.usmotors.com/motorpro** to become a motor professional!