

ALLGUARD® Motors Quality System

All U.S. MOTORS brand UNIMOUNT motors are equipped with the ALLGUARD Motors Quality System, the industry’s best motor winding protection and bearing lubrication.

ALLGUARD Features:

Polyrex® EM Grease

- Outstanding long life, high temperature lubrication of ball and roller bearings
- Specially formulated for electric motor bearing lubrication
- Excellent mechanical shear stability
- Excellent corrosion resistance, even in the presence of salt water

New pulse resistant and abrasion resistant wire

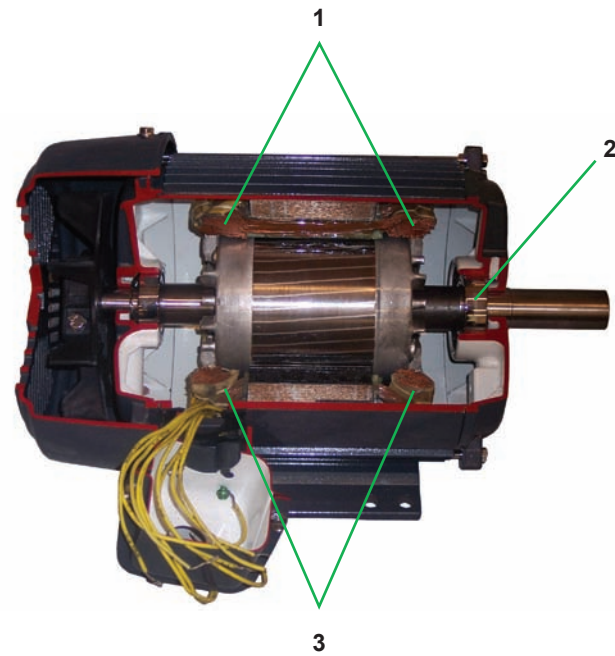
- High temperature pulse endurance performance
- Excellent mechanical shear stability
- Incorporation of “Tough Wire” concepts

100% solids polyester varnish on all frames

- 700 times NEMA required humidity resistance
- Approximately 5000 volt dielectric strength at 25°C
- 2 times film build of water borne varnishes
- 2 times the hot bond strength of epoxy varnish

Typical UNIMOUNT® Motor Construction:

- 1. Wire Pulse and Abrasion Resistant
- 2. Bearing Polyrex® EM Grease
- 3. Windings 100% Polyester Varnish



UNIMOUNT® Motors

Versatility. Adaptability. Reliability.



GENERAL PURPOSE

BRAKEMOTOR

INVERTER DUTY

MULTISPEED

ACCU-TORQ®

CLOSE COUPLED PUMP

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



UNIMOUNT® Motors
Totally Enclosed Fan Cooled (TEFC)

When your applications require *versatility*, *adaptability* and *reliable performance*, the U.S. MOTORS® brand UNIMOUNT® series offers flexible solutions.

UNIMOUNT motors are designed for commercial, light industrial applications such as HVAC, material handling and machine tool. These convertible motors run fans, blowers, conveyors, pumps and compressors.

A wide variety of kit options and available model types have earned the UNIMOUNT motor distinction of being the most versatile in the industry.

Available Kits:

- 1. Canopy cap kit for vertical mounting
- 2. SHUR-STOP® brake kits are available from 1-1/2 to 35 ft. lbs.
- 3. C-Face and D-Flange kits for fast and easy conversions without the need to pull the output bearing
- 4. Shaft grounding ring



Product Overview and Features

Available model types include NEMA Premium®† efficient, inverter duty, close coupled pump, single-phase farm duty, gear motor and special purpose motors. UNIMOUNT motors, along with a wide variety of conversion kit options, eliminate factory lead time and the need to stock multiple ratings.

UNIMOUNT motors feature an extruded aluminum frame (180 frame and larger) and Class F temperature rise at 1.25 service factor, making it the coolest running motor in the industry. Optimized slot designs and low loss stator laminations deliver remarkable efficiency and power factor. Extended electrical flexibility for applications on 60 or 50 Hz, and wye-start delta run on 250 through 280 frames can be achieved with the UNIMOUNT NEMA Premium WORLD MOTOR®.

The feature-rich UNIMOUNT motor offers superb value. Die cast aluminum brackets with steel inserts and vacuum degassed bearings provide reliable performance under severe loads. Lightweight, durable aluminum construction ensures reduced shipping and handling costs. And, installation is easy!

Electrical and Mechanical Features:

- Three Phase, Totally Enclosed Fan Cooled
- 1.25 Service Factor on most ratings
- Oversized diagonally split conduit box
- Rugged motor base (removable on 180 frame and above for footless configuration)
- Aluminum frame on 180–280 frame

- Rolled Steel frame on 56–140 frame
- 40°C ambient
- NEMA®† design B performance, on 60 Hz sine wave power
- Usable up to 3,300 feet above sea level
- CE certified
- Full 50 and 60 Hz operating data on nameplate
- Sealed bearings 56–140 frame, double-shielded 180–280 frame
- Suitable for wye-delta start 250 frame and larger
- Dual voltage ratings suitable for Part Winding Start (PWS) on low voltage
- Lifting provisions 180 frame and up
- Agency recognitions: UL®† and CSA®† certified

Additional Footed Features:

- Shaft slinger on pulley end
- Regreasable shaft-end bearings (180 frame and up)
- Full HP @ 50 Hz

Additional Footless Features:

- Aluminum end shields with steel bearing inserts
- Oversized diagonally split conduit box
- Regreasable shaft-end bearings (180–280 frame)

UNIMOUNT® Motor Series

General Purpose

Applications: Air Compressors, pumps, conveyors, blowers and general industrial equipment applications.

- 1/4–30 HP
- Full 50 and 60 Hz operational data on nameplate
- 1200, 1800 and 3600 RPM
- Design voltages: 200, 208-230/460, 460, 575 volt @ 60 Hz; 190/380, 380 volt @ 50 Hz
- 1.25 SF
- NEMA Premium®† and energy efficient options
- Available configurations: Footed, C-Face Footed, C-Face Footless, D-Flange and drip cover options
- Suitable for wye-delta start on 250 frame and larger
- CE®† mark on nameplate



Brakemotor

Applications: conveyors, machine tools, door operators, speed reducers or any application that requires stops and positive hold.

- Fully assembled, Totally Enclosed Fan Cooled motor and Stearns®† brake
- 1/3–20 HP
- 1200 and 1800 RPM
- Design voltages: 200, 208-230/460, 460, 575 volt @ 60 Hz; 190/380, 380 volt @ 50 Hz
- 1.25 SF
- T-Frame and C-Face Footless configurations
- Non-regreasable and oversized bearings
- Vacuum Pressure Impregnation (VPI)
- Inverter duty – constant torque 2:1; variable torque 10:1 speed range
- Footed, C-Face Footed, and C-Face Footless



Inverter Duty Motor

Applications: pumps, fans, blowers or other inverter-powered applications.

- 1/3–20 HP
- 1200–7200 RPM
- Design voltages: 208–460 volt/12–60 Hz
- Constant horsepower to 90 Hz
- Inverter grade insulation system (meets NEMA MG-1 part 31)
- Double dip and bake with extra bracing
- Premium efficient design
- Special balance – 1/2 of NEMA MG-1 (0.08 inches/second peak for 2–6 pole and 0.06 inches/second pole for 8 pole and slower)



Multispeed Motor

Applications requiring more than one standard speed.

- 1800/900 RPM
- Design voltages: 460 volt @ 50 or 60 Hz
- Lifting provisions on 180 frame and up
- Conversion kits available: Footed, C-Face Footed and D-Flange Footed
- Available in three configurations:
 - Variable torque with one winding – 1/4–25 HP
 - Constant torque with one winding – 1/2–20 HP
 - Constant torque with two windings – 2/3–15 HP



ACCU-Torq® Motor

Used with inverters and vector drives. Used in applications requiring precise speed or position control such as machine tools, material handling, packaging machinery and other applications requiring serve-like performance.

- 1/4–20 HP
- Variable speeds: maximum operating speed: 3600 RPM
- Three Phase
- Design voltages: 230–575 volt
- 1.25 SF
- Constant torque operation from zero to base speed
- Constant power (HP) operation to 2x base speed
- Optimized for IGBT and Intelligent-power module drives
- NEMA®† design A
- Normally closed thermostats
- Configuration: C-Face Footed, C-Face Footless



Close Coupled Pump Motor

Applications: Centrifugal pumps.

- 1–30 HP
- 1800 and 3600 RPM
- Design voltages: 200, 208–230/460, 575 volt @ 60 Hz
- 1.25 SF on most ratings
- NEMA Premium®† and Energy efficient options
- C-Face mounted
- Designed for pump impeller to be installed directly to shaft
- Oversized drive end bearing
- Positively clamped drive end bearing to minimize shaft endplay
- Shaft types: JM, JP, and Westcoast
 - JM shaft motors are for mechanical seals
 - JP and Westcoast shaft motors are for packing type seals

