UNIMOUNT® Motors Versatility At Its Best







EMERSON. CONSIDER IT SOLVED.

Product Overview

Emerson is proud to offer one of the industry's best motor solutions, UNIMOUNT[®] motors. In keeping with our century old commitment to reliability, longevity and customer satisfaction, Emerson's UNIMOUNT[®] motors utilize world-class design. These motors are designed with Emerson's ALLGUARD[™] motor quality system, providing premium high temperature lubrication and winding protection systems, allowing for superior performance and life-span.

U.S. Motors[®] brand UNIMOUNT[®] totally enclosed fan cooled (TEFC) motors are available in 1/4 to 30 horsepower in both high efficiency and NEMA Premium^{®†} efficient designs.



Shown above are some of the many kit options available to easily convert UNIMOUNT[®] motors to meet your specific application requirements.

UNIMOUNT[®] motors are one of the most versatile motors in the industry today, providing mounting flexibility, such as: c-face footed, c-face footless, d-flange, removable base, and brakemotor to name a few. In addition, it can be used to meet customers' requirements for a wide variety of general purpose applications such as, pumps, fans, compressors, general industrial belt drive, direct drive equipment and more.

Available Kits:

- Canopy cap kit for vertical mounting
- > SHUR STOP^{®†} brake kits are available from 1 1/2 to 35ft. lbs.
- > C-face & d-flange kits for fast and easy conversions without the need to pull the output bearing

Product Overview

UNIMOUNT[®] motors offer one of the widest ranges of electrical and mechanical features of any motor on the market today.

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

Additional Footed Features

- Shaft slinger on pulley end
- Regreasable shaft-end bearings (180 frame & 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[®] Motors Equipped With ALLGUARD[™] Motors Quality System

Emerson offers our ALLGUARD[™] motor quality system on all UNIMOUNT[®] motors. This system combines one of the industry's best motor winding protection with the latest advancements in motor bearing lubrication.

<u>ALLGUARD[™] Motors Quality System</u>

- > 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
 - Higher 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



The UNIMOUNT[®] Motor Brand Offering

UNIMOUNT[®] General Purpose Motor

The UNIMOUNT[®] motors can be used for air compressors, pumps, conveyors, blowers and general industrial equipment applications.

- Horsepower: 1/4 30
- Speeds: 1200, 1800, & 3600 rpm
- > Design voltages:
 - 200, 208-230/460,460,575 volt @ 60 hz
 - 190/380, 380 volt @ 50 hz
- Service factor: 1.25
- Energy & NEMA Premium^{®†} options
- > Available configurations: footed, c-face footed, c-face footless, d-flange and drip cover options

UNIMOUNT[®] Brakemotor

Emerson's UNIMOUNT[®] brakemotor is a fully assembled, totally enclosed fan cooled motor and Stearns^{®†} brake which can be used on conveyors, machine tools, door operators, speed reducers or any application that requires stops and positive hold.

- Horsepower: 1/3 20
- > Speeds: 1200 & 1800 rpm
- > Design voltages:
 - 200, 208-230/460, 460, 575 volt @ 60 hz
 - 190/380, 380 volt @ 50 hz
- Service factor: 1.25
- Available configurations: t- frame and c-face footless
- Bearings non-regreasable and oversized
- Vacuum Pressure Impregnation (VPI)
- Inverter duty constant torque 2:1 variable torque 10:1 speed range
- > Available configurations: footed, c-face footed, and c-face footless

<u>UNIMOUNT® Inverter Duty Motor</u> The UNIMOUNT® inverter duty motors can be used for pumps, fans, blowers or other inverter powered applications.

- ➤ Horsepower: 1/3 20
- Speeds: 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 & 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)

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The UNIMOUNT[®] Motor Brand Offering

UNIMOUNT[®] Multispeed Motor

Emerson's UNIMOUNT[®] multispeed motor can be used for applications requiring more than one standard speed.

- Speeds: 1800/900 rpm
- Design voltages: 460 volt @ 50 or 60 hz
- Lifting provisions on 180 frame & up
- Available coversion kits: footed, c-face footed, and d-flange footed

Three available configurations:

- Variable torgue with one winding
 - Horspower: 1/4 25 .
- Constant torgue with one winding
 - Horsepower: 1/2 20
- Constant torque with two windings
 - Horspower: 2/3 15



ACCU-Torg® Motor

Emerson's ACCU-Tora[®] motor can be used with inverters and vector drives. They are particularly suited for applications requiring precise speed or position control such as machine tools, material handling, packaging machinery and other applications requiring servo-like performance.

- Horsepower: 1/4 20
- Speeds: (variable) max. operating speed 3600 rpm >
- > 3 Phase
- Design Voltages: 230 575 volt
- Service Factor: 1.25
- Constant torgue operation from zero to base speed
- Constant power (hp) operation to 2X base speed
- Optimized for IGBT & Intelligent-Power-Module Drives
- NÉMA^{®†} design A
- Normally-closed thermostats
- Available configuration: c-face footed, c-face footless







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The UNIMOUNT[®] Motor Brand Offering

UNIMOUNT[®] Close Coupled Pump Motor

The UNIMOUNT[®] close coupled pump motors are designed for centrifugal pumps.

- > Horsepower: 1 30
- Speeds: 1800 & 3600 rpm
- Design voltages: 200, 208-230/460, 575 volt @ 60 hz
- Service Factor: 1.25 on most ratings
- Standard & premium 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, & Westcoast
 - JM shaft motors are for mechanical seals
 - JP & Westcoast shaft motors are for packing type seals





Limited Warranty

See warranty section of the Full Line Standard Motor Catalog (FL600) catalog or http://www.usmotors.com/FL600/LimitedWarranty.pdf

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