

A.C. Farm Duty Motors



Product Overview

Nidec Motor Corporation offers U.S. MOTORS® Farm Duty motors to handle the special heavy duty applications of the agricultural market.

Designed for use in applications, such as crop dryers, exhaust fans, poultry and livestock auger drive systems, barn cleaners, manure pumps, silo unloaders and more.

Agri Duty Motor

The U.S. MOTORS® brand Agri Duty Motor is used for powering agitators, augers, compressors, surveyors, feeder, hay hoist, grinders, blowers and other farm applications.

Features

- Horsepower: 1/3 to 10 HP
- Phase: Single phase footed, Single phase C-face footless, Three phase footed
- Insulation: Class B or F
- Bearing Protection: Shaft slinger
- Manual reset thermal overload protector
- Continuous duty
- Capacitor start
- Fully gasketed, reversible
- 1.15 service factor through 1 HP



Ultra High Torque Motor

U.S. MOTORS® brand Ultra High Torque Motors are designed for starting torque loads (typical starting torque: 300 - 400% of full load). Typical applications include barn cleaners, manure pumps, silo unloaders, stock feeders and other heavy duty farm equipment.

Features

- Horsepower: 1/3 to 10 HP
- Phase: Single phase footed, Single phase C-face footless, Three phase footed
- Insulation: Class B or F
- Bearing Protection: Shaft slinger
- Manual reset thermal overload protector
- Continuous duty
- Capacitor start
- Fully gasketed, reversible
- 1.15 service factor through 1 HP



Aeration Fan Motor

These Aeration Fan Motors are used for powering aeration fans in farm grain storage environments.

Features

- Enclosure: Totally enclosed air over, reversible
- Insulation: Class B (56Z frame), Class F (143 frame)
- Bearing Protection: Keyed shaft drilled 1 inch deep and tapped 1/4 inch UNC
- Automatic reset thermal overload protector



Auger Duty Motor

Auger Duty Motors are designed for use on unit heaters.

Features

- Horsepower: 1/8 to 1.5 HP
- Insulation: Class B
- Manual reset thermal overload protector
- Reversible rotation
- Capacitor start & split-phase options



Crop Dryer Motor

Crop Dryer Motors are used on vane axial crop dryers with air over applications, and where the fan is mounted directly on the motor shaft.

Features

- Horsepower: 5 - 7 through 10 - 12 HP
- Insulation: Class F
- Bearing Protection: Nonstandard keyed shaft drilled 1 inch deep and tapped 1/4 20 UNC
- Thermostat protected
- Special service factor
- Reversible

Hatcher & Setter Motor

Hatcher & Setter Motors are designed for use in poultry hatcheries.

Features

- Horsepower: 1/4, 1/3, and 1/2 HP
- Enclosure: Totally Enclosed Air Over
- Insulation: Class B
- Permanent split capacitor



Farm Fan Motor

Farm Fan Motors are designed for use in exhaust and poultry fans, air circulators, and other direct drive fans used in poultry and livestock houses.

Features

- Horsepower: 1/4 HP to 1.5 HP
- Phase: Single phase or three phase options
- Enclosure: Totally Enclosed Non-Ventilated options
- Insulation: Class A or B



ID300

The ID300 is an integrated motor and drive combination for pumping and air moving in commercial and industrial applications.

Features

- Horsepower: 1 – 10 HP
- Phase: Three Phase
- RPM: Inverter Duty 6:1 (10-60 Hz) Variable Speed
- Voltage: 230 or 460
- Speed Ranges detailed for both Variable Torque loads (Fans and Centrifugal Pumps) and Constant Torque loads (Compressors & Hydraulic Pumps)
- Enclosure: Totally Enclosed Fan Cooled (TEFC)
- Mounting: Foot Mounted, C-Face, and JM Close-Coupled Pump Mounting



Agri-Fusion™

The Agri-Fusion motor combines a variable speed motor and drive for a perfectly synchronized and easy-to-install solution for agricultural applications.

Features

- Horsepower: 3 HP
- Poles: 10 (600 RPM)
- Frame: Aluminum 180T
- Enclosure: Totally Enclosed Air Over (TEAO)
- Efficiency Level: Super Premium, IE4 or better
- Electrical Design: Brushless, Permanent Magnet
- Drive Options: Integrated or Separate Drive
- Motor Type: BPM (Ferrite)
- Ingress Protection: Motor IP55, Drive IP56



Washdown Motor

Nidec Motor Corporation carries a wide range of U.S. MOTORS® brand washdown products including painted, paintfree, stainless steel and pedestal fans. These easy to clean washdown motors are designed to meet requirements for food processing, canners, meat packers, bakeries, dairies and more.

Features

- Horsepower: 1/4 to 10 HP
- Phase: Single phase & three phase options
- Enclosure: Totally Enclosed Air Over, Totally Enclosed Non-Ventilated, Totally Enclosed Fan Cooled
- Mounting Options: Rigid base, C-face footed, C-face footless, yoke mounts available
- Insulation: Class F



Precision Flow™

The Precision Flow motor is designed for a wide range of air-moving applications. This advanced EC motor provides constant torque and speed control with tri-voltage compatibility and flexible configurations to meet modern HVAC and ventilation needs.

Features

- Horsepower: 1/3, 1/2, 3/4, 1 HP
- Voltage: 1Ø, 115/208 – 230/277 Volts
- Speeds: 1200 and 1800 RPM
- Inputs: 0-10V, 10-OV, RS-485, or control via on-board or remote potentiometer
- Operation Modes: Constant Torque, Constant Speed
- Frame: NEMA®† 48
- Enclosure: Totally Enclosed Air Over (TEAO) or Open Air Over (OAO)
- Mounting Options: Stud, Rigid Base, or Belly-Band Mounting



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