

# Commercial Buildings

Facilities Maintenance Electric Motor Guide



FRACTIONAL AND INTEGRAL  
REPLACEMENT MOTORS

**Nidec**

## COMMERCIAL BUILDINGS



### U.S. MOTORS® makes it easy to find the right, energy-efficient replacement motor.

Most motors in commercial buildings are used to power fans and pumps in heating, ventilation and air conditioning (HVAC) systems. The remaining commercial motors are used to power office equipment, vertical transportation (elevators), sprinklers and other building systems. Motors used in these buildings are purchased as part of, or together with, other equipment or systems, such as air handlers, compressors and air conditioners. When a motor fails, having the right replacement motor available when you need it is imperative to keeping your building running efficiently.

Nidec offers a full line of fractional and integral U.S. MOTORS® brand motors to keep your building running smoothly and without downtime. Our line spans every building system from hydraulic elevators, water support and supply systems to HVAC motors for indoor air quality and comfort.

Looking for a direct replacement fractional or integral motor? The U.S. MOTORS line offers an extensive portfolio of replacements and we have the tools—both eBusiness and motor specifications and technical data, to connect you with the right motor quickly at [ecatalog.motorboss.com](http://ecatalog.motorboss.com):

- Competitive cross reference tools
  - More than 50,000 cross references by competitor or OEM catalog and model numbers.
- eCatalog search tool (search by ID, features or applications)
- Online chat
- Dimension prints
- Nameplate data
- 3D models
- Performance data
- Wiring diagrams
- Installation and maintenance manuals



The U.S. MOTORS line of products, as well as a full complement of production and facilities maintenance solutions, is available locally and throughout the world:

- On hand inventory at local distributors
- Authorized service stations—warranty and repair

*If you have questions, e-mail us at [HVACRCustomerService@nidec-motor.com](mailto:HVACRCustomerService@nidec-motor.com)*

We make it EASY for you to find and purchase  
U.S. MOTORS® brand replacement motors!



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 Drip-Proof and Totally Enclosed motors that meet or exceed NEMA Premium® requirements.

## Hydraulic Pumps

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## Roof

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## Sprinkler Systems

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## Grounds

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## Cafeteria

# Product Overview *(listed in alphabetical order)*

## 1 Air Circulator Motors

- Single Phase, OAO and TEAO
- 1/15, 1/10 HP and 1/4 – 1/2 HP
- 1800, 1200, and 900 RPM
- 42 – 56 Frame
- Single and two speed options
- Oscillating and non-oscillating options



## 2 Air Compressor

- Single Phase, ODP
- 1/2 – 5 HP
- 3600 RPM
- 56, 143 and 184 Frame
- High breakdown torque



## 3 C-Face: ODP, TEFC and Hazardous Location

- Single Phase, Split Phase & Capacitor Start
- Three Phase, Footed and Footless options
- 1/12 – 60 HP
- 3600, 1800 and 1200 RPM
- 56 – 326 Frame
- Standard, Energy and Premium Efficient



## 4 Carbonator Pump

- Single Phase, ODP
- 1/4 – 1/2 HP
- 1800 RPM
- 48 Frame



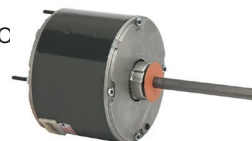
## 5 Close Coupled Pump

- Single and Three Phase, ODP, TEFC and Hazardous Location
- 1 – 60 HP
- 3600 and 1800 RPM
- 143 – 326 Frame
- JM and JP shafts available



## 6 Condenser Fans

- Single and Three Phase, OAO and TEAC
- 1/10 – 2 HP
- 1725, 1625, 1550, 1075 and 825 RPM
- 48 and 56 Frame
- Single and two speed



## 7 Cooling Tower

- Three Phase, TEFC and TEAO
- 2 – 100 HP
- 1800, 1200 RPM
- 145 – 447 Frame
- Single and two speed
- NEMA Premium®/inverter duty
- Meets specifications for Baltimore Aircoil Company®, Evapco® and Marley® cooling tower motors

NEMA Premium



## 8 Elevator Duty: Dry Hydraulic

- Three Phase
- 3 – 75 HP
- 3600, 1800 and 1200 RPM
- Z and L32 flange mounting



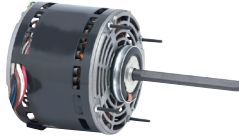


**9 Elevator Duty: Submersible**

- Single and Three Phase
- 3 – 75 HP
- 3600, 1800 and 1200 RPM
- Z and L32 flange mounting

**10 Fan and Blower**

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

**11 Fire Pump Motor**

- Three Phase, ODP
- 7-1/2 – 250 HP
- 3600 and 1800 RPM
- 184 – 445 Frame
- UL® listed for fire pump application
- Available in horizontal frame and vertical JP close coupled pumps

**12 Gate and Door Motors**

- Single and Three Phase, ODP and TEFC
- 1/3 – 1 HP
- 1800 RPM
- 56 and 56C Frame

**13 Hot Water Circulator Pump**

- Single and Three Phase, ODP
- 1/12 – 1-1/2 HP
- 1800 RPM
- 48 and 56 Frame
- Direct replacement motor for B&G® (Bell & Gossett), Taco® and Thrush™ brand circulator pumps

**14 ODP and TEFC, Single Phase, Capacitor Start**

- 1/8 – 10 HP
- 3600, 1800 and 1200 RPM
- 48 – 215 Frame
- Rigid welded and cradle bases
- C-Face Footed and Footless
- Automatic or manual reset thermal overload protector options

**15 ODP and TEFC, Single Phase, Split Phase**

- 1/12 – 3/4 HP
- 3600, 1800, 1200 and 900 RPM
- 48 – 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

**16 ODP, Three Phase**

- 1/4 – 400 HP
- 3600, 1800, 1200 and 900 RPM
- 48 – 449 Frame
- Energy and NEMA Premium® efficient

**17 Package Terminal A/C Heat Pump**

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

**18 TEFC, Three Phase, 841 PLUS®**

- 1 – 400 HP
- 3600, 1800 and 1200 RPM
- 143 – 447 Frame
- Meets IEEE® 841 GM7E-TA specifications
- Five-year limited warranty\*
- NEMA Premium® efficient
- VBXX® bearing isolators by Inpro/Seal® help protect bearings

NEMA  
Premium

**19 TEFC, Three Phase, CORRO-DUTY®**

- 1 – 400 HP
- 3600, 1800 and 1200 RPM
- 143 – 447 Frame
- All cast iron construction
- NEMA Premium® efficient

NEMA  
Premium

**20 TEFC, Three Phase, HOSTILE DUTY™**

- 1 – 350 HP
- 3600, 1800, 1200 and 900 RPM
- 143 – 449 Frame
- Energy and NEMA Premium® efficient
- Cast iron frame and brackets
- Ball and roller bearing options

NEMA  
Premium

**21 TEFC, Three Phase, UNIMOUNT®**

- 1/4 – 30 HP
- 3600, 1800, 1200 and 900 RPM
- 56 – 286 Frame
- Energy and NEMA Premium® efficient
- C-Face, Footed and Footless and removable base

NEMA  
Premium

**22 UNIMOUNT® Brake Motor**

- Three Phase, TEFC with Brake Added
- 1/3 – 20 HP
- 1800 and 1200 RPM
- 56 – 256 Frame
- Rigid base, C-Face, Footed and Footless

**23 Unit Heater**

- Single Phase, TEAO
- 1/15 – 3/4 HP
- 1550 and 1075 RPM
- 48 and 56 Frame
- Cradle and stud mount

**24 Washdown Motors**

- Painted, Paint-Free and Stainless Steel
- 1/2 – 10 HP
- 3450, 1725 and 1150 RPM
- 56 – 215 Frame

**25 Water System Pumps**

- Single and Three Phase, ODP and TEFC
- 1/3 – 3 HP
- 3600 and 1800 RPM
- 48 and 56 Frame
- C-Face, square flange and sump pump
- Footed and Footless



\*For details, refer to: [www.usmotors.com](http://www.usmotors.com)

