Call or visit your local branch or go to grainger.com/daytonmotors for complete product line information.

Motors are used in a wide variety of applications.

In some applications more than 1 motor design would work; in others, if an exact replacement cannot be found, a similar motor with slight differences in mechanical and electrical characteristics will provide reliable operation. The following selection guide is designed to help you choose the correct motor for your application.

**STEP 1: GATHER MOTOR INFORMATION**

You will need the following information to properly select a motor. If you are replacing a motor, much of the information can be found on the existing motor nameplate. See the sample nameplate on this page:

1-Phase (PH): Either single (1) or three (3).  Match exactly.

2-Voltage (Volts): Match exactly.

3-Horsepower (HP): Very small motors are often rated in watts. Choose an equal or next higher HP.

4-Physical Size/Frame (FR): Match exactly.

5-Speed (RPM): Match within 5%.  Choose a motor of equal or greater speed.

6-Frequency (Hz): Match exactly.

7-Service Factor (SF): Choose a motor of equal or greater number.

8-Type: See table below.

9-Enclosure (Encx): See table below.

10-Duty Cycle: If current motor is intermittent duty, you may upgrade to continuous. Air-over must be installed in the driven fan’s airstream.

11-Rbearing Type: Sleeve or Ball.

12-Thermal Protection:

**AC MOTOR TYPES**

For general-purpose applications such as conveyors, pumps, compressors, tools, and other equipment requiring remote control instant reverse, choose a motor that is designed for use with speed controls or NEMA Type K DC power supplies on constant or diminishing torque applications.

**DEFINITE-PURPOSE MOTORS**

Our definite-purpose motors are built with features and benefits that match specific applications. From industrial applications like driving a punch press to agriculture uses such as managing a hatchery for chickens, count on Dayton motors for the design features you need.

**DAYTON MOTORS PRODUCT GUIDE**

Dayton motors are built with heavy-duty construction, demanding specifications and the design functionality to fit both commercial and industrial applications. With one of the most comprehensive lines of motors in the market, the Dayton brand has 25 different types to help you find just what you need to get the job done. Let the dependability of the Dayton brand help you reduce downtime, increase efficiency, meet deadlines and stay within budget.

**WASHDOWN MOTOR**

For use in the food processing, chemical processing and beverage industries.

**FARM DUTY (AUGER)**

For conveyors, sits unloaders, barn cleaners, compressors and manure pumps.

**AIR COMPRESSOR MOTOR**

Direct replacements for selected air compressors. Mechanical features provide long life in high-tension, belt-type loads, which typically shorten motor life.

**JET/WELL PUMP**

For jet pump water systems, centrifugal and hydraulic pumps and other applications requiring NEMA 56C- or 56J-face mounting.

**PRESSURE WASHER**

Suitable for high-pressure water applications, including car wash, pressure washer, sewer jetting and cooling misting.

**POWER TOOLS**

For use with high-speed, moderate-starting-torque woodworking and metalworking tools, wood lathes, sanders, grinders, table saws, planers and other applications where the maximum HP load will not exceed nameplate rating.

**UNIVERSAL AC/DC**

Designed for use with speed controls or NEMA Type K DC power supplies on constant or diminishing torque applications.

**VIBRATOR**

For bims, choppers, hoppers, screens, feeders, compaction tables and concrete forms and pumps.

**INSTANT REVERSE**

Designed for mechanical doors, gates, hoists and other equipment requiring remote control instant reversibility.

Find it at Grainger.

Call or visit your local branch or go to grainger.com/daytonmotors for complete product line information.
GENERAL-PURPOSE MOTORS
Our general-purpose motor offering is one of the most extensive in the market, including split-phase, capacitor-start and 3-phase designs. From 1/12 HP to 50 HP, the Dayton brand has a wide variety of designs and configurations to help meet your motor needs.

HVAC MOTORS
Grainger offers a variety of Dayton motors for HVAC applications. From simple C-frame motors to commercial condenser fan motors, the Dayton brand has what you need to help keep your system up and running.

ACCESSORIES AND POWER TRANSMISSION
- CAPACITORS: Motor run and motor start capacitors are all RoHS compliant, UL and CSA recognized.
- SPEED REDUCERS: Right angle, dual-shaft and parallel design in ratios from 5:1 to 100:1.
- BELTS: A complete line of belts in all sizes and HP ranges.
- VARIABLE FREQUENCY DRIVE: For use in adjustable speed applications of 3-phase motors on pumps, conveyors, machine tools and other industrial equipment.
- SOFT-START CONTROLLERS: Help reduce motor temperatures and prolong motor life while decreasing shock on mechanical systems.
- PULLEYS AND SHEAVES: A complete line of precision cast iron sheaves in solid bore and bushed designs.
- MOUNTING BASES: Designed to position mounted motors for proper belt tension during initial installation and at later maintenance checks.

MOTOR TEST LAB
Before we add a Dayton motor to the Grainger product offering, our engineers carefully evaluate each design. Our quality audit process is unique in industrial and commercial distribution. This capability enables Grainger to maintain quality standards on a consistent basis as part of our commitment to total customer satisfaction.
- Equipment is state of the art
  - All Dayton motors are designed to meet UL and NEMA specifications
  - Every Dayton motor is covered by a warranty, so you can buy it with confidence. Premium-efficiency motors carry a three-year warranty.

KNOWLEDGEABLE TECHNICAL SUPPORT
Our Technical Support Specialists have hands-on experience in all major product categories and are trained to assist with the following:
- Application assistance
- Installation
- Maintenance
- Performance data
- Product selection
- Troubleshooting
Call 1-800-Grainger (1-800-472-4643).

FULL-FACT NAMEPLATE
All Dayton motors offer full-fact nameplates with easy-to-read wiring diagrams. This helps reduce installation time and prevents miswiring.

WHEN YOU NEED IT FAST, THE DAYTON BRAND DELIVERS.
You’ll get it quickly, because it’s stored at a nearby Grainger branch. You can count on great service, availability and technical knowledge with Grainger.

GRAINGER HISTORY IN MOTORS
The Grainger Motor Test Lab was started in 1960 and is dedicated to ensuring the quality of every motor that Grainger offers. The lab is still in operation at its current location in Mundelein, IL.