NEMA MOTORS

Baldor-Reliance® washdown motors
Optimal protection and reliability
Cleanability, reliability, availability

One supplier with decades of experience
Baldor-Reliance washdown duty motors come in a variety of designs to fit the many needs in the marketplace. From white washdown to paint-free, stainless steel to food safe, these choices allow you to select the right motor for the amount of protection required for your specific application. While some applications may see just a light washdown, others may require the harshest high-pressure cleaning and caustics.

When and where you need a motor
Built in US manufacturing facilities and available from our industry leading global distribution network assures that Baldor-Reliance washdown motors are available when and where you need them.

Less unplanned downtime
Each design is specifically tailored to different areas/zones within a production environment. We have a solution to keep your motors in service longer, with fewer failures, no matter how harsh the conditions.
Know the zone
Save money by specifying the right equipment for the operating environment

“...design available that will provide the best longevity for my equipment?”

That is the most common question we get every day when we talk with food producers. The answer is not as simple as just choosing the appropriate horsepower, speed or torque and basing it all on price. It goes beyond the initial purchase price and an evaluation of the total cost of ownership is critical.

Underspecifying a motor can be very costly. Selecting and installing a motor based on the operating environment is paramount to ensuring your process runs without interruption and keeps your operations clean and safe.

Following the National Sanitation Foundation (NSF) guidelines, food equipment standards are designed in a manner that classifies different surfaces or areas of equipment into defined zones of exposure.

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**Food zone 1**

Zone 1 areas are where direct contact with food products is normal and expected. Components must be able to withstand aggressive, high pressure, high temperature cleaning methods.

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**Splash zone 2**

Direct contact with food products is not expected with the potential that liquids used in processing or cleaning may come into contact with the equipment. Equipment must be able to withstand regular or frequent washdowns.

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**Dry zone 3**

Equipment is typically located outside of a normal washdown area where direct contact with food products during normal operation is not expected.
White washdown motors

Features
- Stainless steel hardware
- Neoprene gaskets
- Double sealed ball bearings
- Lip and v-ring seal on drive end
- Two-part epoxy finish

Broaderest selection
- Single and three phase
- Pump designs
- Brake motors
- Shaft grounding
- Sinewave and inverter

Specifications

<table>
<thead>
<tr>
<th>Horsepower</th>
<th>1/3 - 20 HP (Three phase)</th>
<th>1/2 - 1-1/2 HP (Single phase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame</td>
<td>56C - 256TC</td>
<td></td>
</tr>
<tr>
<td>Voltage</td>
<td>115/230, 230/460, 575 volt</td>
<td></td>
</tr>
<tr>
<td>Speed</td>
<td>3600, 1800 or 1200 RPM</td>
<td></td>
</tr>
<tr>
<td>Enclosure</td>
<td>TEFC &amp; TENV</td>
<td></td>
</tr>
<tr>
<td>IP code</td>
<td>IP55</td>
<td></td>
</tr>
<tr>
<td>Mounting styles</td>
<td>Standard foot-mounted, C-face, foot-mounted, and footless</td>
<td></td>
</tr>
<tr>
<td>Frame material</td>
<td>Heavy gauge steel</td>
<td></td>
</tr>
<tr>
<td>Hardware</td>
<td>300 series stainless steel</td>
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</tr>
<tr>
<td>Finish</td>
<td>White epoxy topcoat</td>
<td></td>
</tr>
</tbody>
</table>

Baldor-Reliance white washdown motors have been the workhorse of the food industry for over 30 years, delivering reliability and energy cost savings. These motors are designed for wet, humid environments that see splashing and light washdown.

Minimizing corrosion
Corrosion is a significant issue in the food and beverage industry and that is why we continually improve our designs to ensure corrosion is minimized.
- Stainless steel hardware and shaft extension
- Two-part epoxy finish that is five times more resistant to corrosion and chipping than standard paint

Sealed frame
Neoprene gaskets, lip and v-ring seals keep moisture from entering the internals of the motor. As the motor heats up and cools down, condensation can build up. To relieve this condensation, maintenance friendly drain holes and plugs can be removed.
When an application requires cleaning solutions and light washdowns that could potentially compromise the surface of a painted motor, paint free motors are the answer.

Protecting the internals
A rotating non-contact labyrinth seal on the drive end shaft extension protects the motor bearings by rotating and expelling contaminants. As an added layer of protection to ensure debris does not reach the bearing lubricant, double sealed bearings are standard on paint free motors. By utilizing sealed bearings, relubrication and maintenance is minimized.
When the application requires caustic cleaning solutions and sanitizing washdowns which will compromise the surface of a standard washdown motor, stainless steel motors are the answer.

**Minimize your risk of safety violations**

Designed for harsh food processing environments; impervious to rust and deterioration caused by caustic sanitizing.

Stainless steel motors utilize corrosion resistant materials across all components minimizing your risk of potential violations for inadequate equipment.
Food safe motors

Features
- All stainless steel construction
- Epoxy encapsulated windings and conduit box
- Two-barrier mechanical seal on the output shaft
- 360 rotatable conduit box (Three phase)
- Laser marked nameplate
- Independently welded feet

Cleanability
- Smooth contours and finish with a rotatable, round conduit box allows water and debris to shed from the housing
- Independent feet allow the motor to be effectively and efficiently cleaned

Flexibility & safety
- Our rotatable conduit box eliminates the need to reorient the motor to match power supply
- Color-coded leads are easily identifiable and make connection safer and easier
- Lifting provisions on 180 – 280 frame allow for easier and safer maneuvering

Designed for food processing where reliability and cleanability are of utmost importance in an intense, caustic cleaning environment. Baldor-Reliance Food safe motors are designed to perform reliably- at maximum efficiency- around the clock and be effectively cleaned to a hygienic level to ensure uncompromised food safety.

ABB’s Baldor-Reliance Food Safe stainless-steel motors are designed to perform longer than any other industrial electric motor available today.

Footnote: more information on food safe motors, visit: https://www.baldor.com/FoodSafeMotors
ABB IEC Food Safe motors are available in the power range 0.18 - 7.5 kilowatt (kW), in 2 - 6 pole versions for 230 - 690 volt at 50 or 60 hertz (Hz). They feature IE3 premium efficiency to reduce energy consumption and emissions. Flexible mounting arrangements allow motors to be mounted in different positions shaft up or down or in inclined positions. In order to follow hygienic design principles, ABB IEC food safe motors in frame sizes 71-90 are without a cooling fan. Standard configuration of motors in frame sizes 100-132 is totally enclosed fan cooled.
**Flexibility**

Custom capabilities, Mod Express & accessories

Modifying or designing a custom washdown motor is a specialized task because the motors must meet rigorous safety and quality requirements. Our network of manufacturing facilities and modification centers have the training and capabilities to design or modify a motor to fit your exact requirements.

Manufacturing locations: Fort Smith, AR; Ozark, AR; Athens, GA; Gainesville, GA; Columbus MS; Kings Mountain, NC; Westville, OK

Modex centers: Fort Smith, AR; Atlanta, GA; Chicago, IL