

ABB MOTORS AND DRIVES

# Sustainable operation of pumps in food and beverage plants



- Motor and drive solution that keeps the pumps running reliably in the production line, in cooling and refrigeration system, in cleaning and other production support applications.
- Using an ABB SynRM motor and drive package will ensure world class energy efficiency.

# Sustainability. Reliability. Quality. Efficiency. Everything counts.

Pumps are everywhere in a food and beverage plant. Our motor and drive solutions will keep your pumps operating reliably while ensuring high quality products and saving energy.

## One stop shop

Highest efficiency available with the SynRM and drive package from one supplier.

## Reliable pumping

You can depend on ABB drives and motors to keep your pumps running, day after day. SynRM motors run with lower bearing and winding temperatures, which further increases reliability.

## Efficient pumping

The combination of IE5 SynRM technology with variable speed drive control offers the highest package efficiency over the speed range. Compared to a conventional AC motor and drive, you can achieve a 10% reduction in energy consumption from the package. As a result the payback time for the SynRM solution could be less than one year.

## Quality pumping

Our drives anti-cavitation software extends the pump's lifetime and secures the process by detecting cavitation, and if needed corrects the motor speed smoothly to ensure optimal process and liquid flow.

## High productivity

The drive features soft pipe filling function, enabling a smooth build up of pressure and flow in the pipes, thus increasing the lifetime of piping and pump systems by avoiding pressure peaks and allowing faster pumping.



**We have a portfolio of  
global services to meet your needs**

No matter where your pump is installed or used, our wide service partner network provides global support available locally. From recovery services to performance improvement services, we can make the difference for you every day by keeping your operations running profitably, safely, and reliably. Our domain expertise is strengthened by a service offering tailored to your needs and delivered through the ABB Motion OneCare agreement.



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ABB offers a broad portfolio of motors for the food and beverage industry that will help you achieve better efficiency and reliability.

**IE5 Synchronous Reluctance Motors (SynRM)**

- Very high efficiency – up to IE5 – reduces energy consumption and emissions
- Lower winding and bearing temperatures mean improved reliability and longer lifetime
- Enables higher quality pumping through accurate speed and torque control
- Quiet operation reduces noise in the plant for a better working environment
- Available in the power range 5.5-315 kW, IEC frame sizes 132-315
- Magnet free rotor increases reliability and reduces need for service



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ABB general purpose and industrial drives are part of the all-compatible family, which enable a more efficient operation, extension of the equipment lifetime, and cost savings.

- Drives available with IP21 and IP55 protection class
- Reduced harmonics based on internal choke
- EMC level C2 due to built-in EMC filter
- Safe torque off (SIL 3/PL e) function ensures machine, production and personnel safety
- Compact design for easy installation, commissioning, and maintenance
- State-of-the-art assistant control panel, up to 20 different languages with help functions
- Primary settings and control macros for fast commissioning of the product
- Wide range of fieldbus adapters enables connectivity with all major automation networks
- Bluetooth capability and mobile app to connect and control drives that are difficult to access



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For more information, please contact  
your local ABB representative or visit

- [new.abb.com/drives](https://new.abb.com/drives)
- [new.abb.com/drives/drivespartners](https://new.abb.com/drives/drivespartners)
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