

ABB MOTORS AND DRIVES

Energy efficient and reliable operation of cooling compressors in food and beverage plants



- ABB drives and motors keep your refrigeration compressor running, day after day.
- Using an ABB SynRM motor and drive package will ensure world class energy efficiency.

Sustainability. Reliability. Quality. Efficiency. Everything counts.

Refrigeration accounts for a large portion of the electricity bill in a food processing plant. An energy efficient drive and motor package will reduce energy consumption while making food safety a priority.

One stop shop

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

Non-stop operation

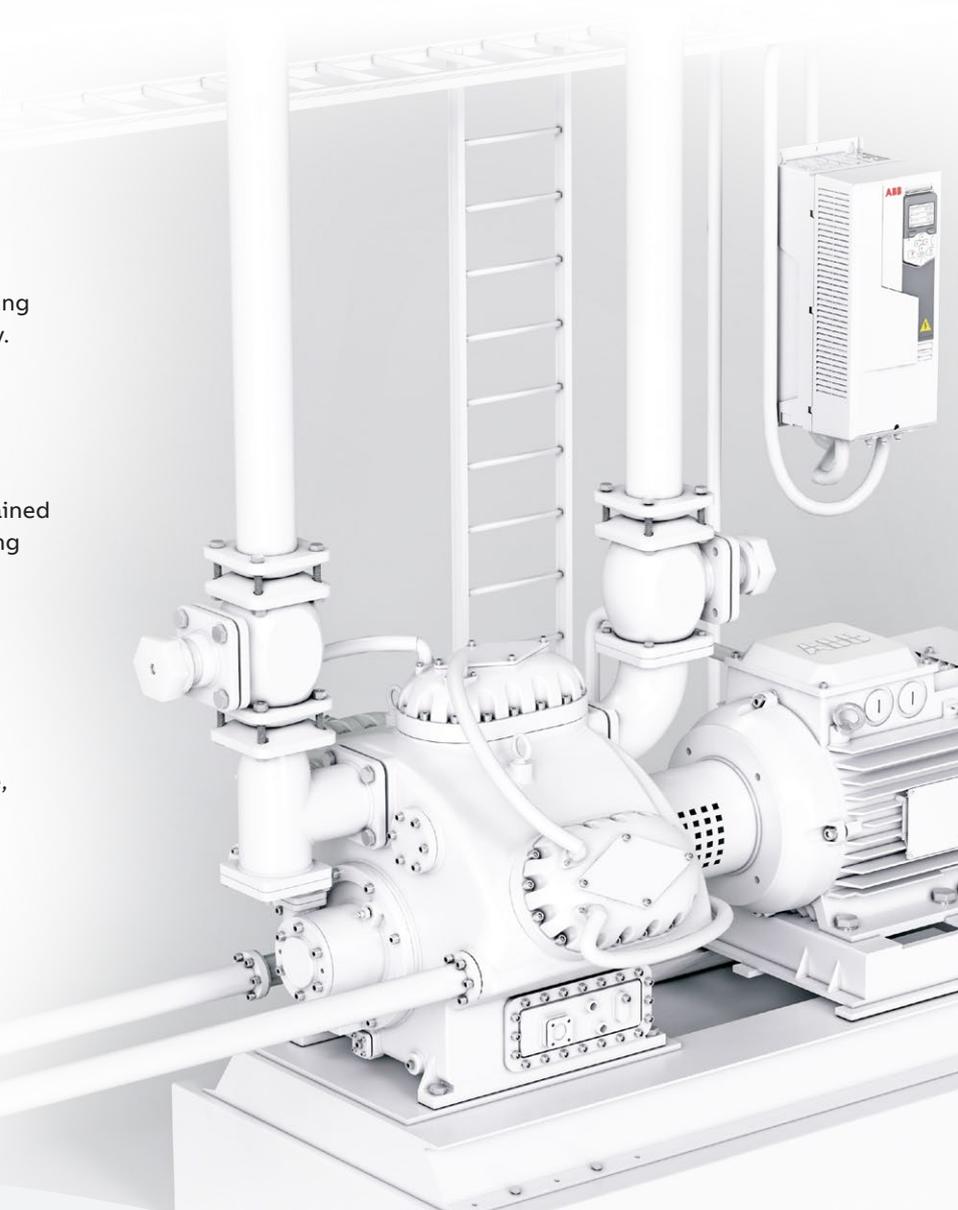
Rely on ABB drives and motors to keep your cooling compressor running, day after day. SynRM motors run with lower bearing and winding temperatures, which further increases reliability.

Precise cooling

SynRM technology with encoderless open loop control provides highly accurate speed control. This ensures that required torque can be maintained under changing load conditions, while minimizing energy consumption.

High efficiency

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



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

No matter where your cooling compressor 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.



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 precise cooling through accurate speed and torque control
- Quiet operation reduces noise 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 the need for service



Variable speed drives enable a more efficient operation, extension of the equipment lifetime, and cost savings.

Motors driving refrigeration systems are normally run at a constant speed even though the load is varying. By using drives, the speed of the motor can be varied to meet the dynamic load demand, thereby reducing the amount of energy consumed.

- Drives that provide even better levels of energy efficiency
- Compact general purpose and industrial drives that offer precise control, flexible integration. The drive types include the wall-mounted (ACS580-01), cabinet-built (ACS580-07) and drive module (ACS580-04) variant of the ACS580 series. The industrial drives include the drive module variant (ACS880-04), cabinet-build variant (ACS880-07) and the cabinet-built ultra-low harmonic variant (ACS880-37). We also offer a broad compatibility with your plant's existing automation networks and systems
- Wide range of fieldbus adapters enable connectivity with all major automation networks
- Bluetooth capability and mobile app to connect and control drives that are difficult to access
- Safe torque off (SIL 3/PL e) function ensures machine production and personnel safety
- Compact design for easy installation, commissioning and maintenance



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

- new.abb.com/drives
- new.abb.com/drives/drivespartners
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