Reducing CO2 emissions is one of the major challenges we face in saving the environment. With industry responsible for more than 70% of electricity consumption, motorised applications have the potential for considerable savings to be made.

The use of variable speed and optimisation of mechanical systems are the main routes to achieving maximum savings.

DYNEO®, at the cutting edge of commercially-available variable speed technologies, brings together all LEROY-SOMER’s permanent magnet solutions for drives and synchronous motors.

The DYNEO® range includes the following series:

**LSRPM enclosed synchronous motor:**
- IP 55 construction in accordance with IEC 60034
- Power rating from 0.75 to 400 kW
- Torque from 1 to 1400 N.m
- Speed from 1 to 5500 min⁻¹
- Frame size from 90 to 315 mm
HPM synchronous rotor/stator assembly:
- Compact construction for integration in machines and processes
- Power rating from 7 to 350 kW
- Torque from 125 to 1400 N.m
- Speed from 1 to 6000 min-1
- Frame size 200 to 280 mm

DYNEO®, INNOVATION:
By reducing rotor losses, the patented radial magnet rotor technology greatly improves the drive's efficiency and specific output power.

With the LSRPM series, this innovative technology is now available in an IP 55 IEC mechanism, the most commonly used throughout the industry.

The assemblies in the HPM series have been reduced in length thanks to a toothed winding design.

DYNEO®, ENERGY SAVINGS:
At rated speed, motors in the DYNEO® range have significantly better efficiency than high-efficiency induction motors.

This difference in efficiency becomes even more significant when operating below rated speed, which is by definition the case in variable speed applications!

The return on investment time compared to a conventional solution is very often less than 12 months.

DYNEO®, TORQUE and SPEED performance:
With guaranteed torque over very wide speed ranges, without derating or forced ventilation, DYNEO® is also the simple and efficient solution for applications requiring high torque at high speed.

Motors in the DYNEO® range are designed to rotate faster than induction motors, which allows:
- The motor speed to be adapted to that of the driven machine, eliminating transmission devices such as gearboxes
- Enhanced performance of the driven machine, by increasing its speed.
The **LSRPM** motor, with an available power range up to 400 kW in an aluminium frame, is **significantly smaller and lighter** when compared with a conventional induction motor of the same power rating.

The **HPM** is a rotor/stator assembly for manufacturers who wish to simplify, or even eliminate, mechanical transmissions in order to increase the overall efficiency of the application. For instance, the **HPM** can be mounted in place of a pulley (overhanging assembly on the machine shaft, compressor screw, etc).

These much more compact solutions have a number of advantages: reduction in size of the chassis supporting the motor and hence the client machine, ease of installing the motor on site, simplification of lifting equipment, reduction in transport costs, etc.

The modularity of the series in the **DYNEO®** range with their foot mounted, flange mounted or face mounted configurations, plus the numerous associated options, makes it easy to replace any conventional drives already installed.

**DYNEO®**, **COMPACTNESS and MODULARITY**:  

The **DYNEO®**, **MAINTENANCE SAVINGS**:  

The low losses of magnet rotor technology reduce temperature rise in the bearings to a marked extent. This results in a corresponding reduction in the frequency of bearing greasing intervals or increases the motor service life.

**DYNEO®**: the **cost-effective, high-performance variable speed solution** which more than meets the expectations of machine users and integrators in a variety of fields of application and use: pumping, ventilation, compression, conveying, extrusion, centrifuging, process control, generators, etc.

*Emerson Industrial Automation, a business of Emerson, is a global technology provider that enables productivity, efficiency and quality gains for customers across a spectrum of industries. Our products include alternators, electric motors and drives, electrical distribution devices and mechanical power transmission, fluid automation and ultrasonic joining solutions. Emerson brands include Appleton, ASCO, Branson Ultrasonics, Browning, Control Techniques, Kop-Flex, Leroy-Somer, McGill, Morse, Numatics, O-Z/Gedney, Rollway, SealMaster, and System Plast. For more information, visit [www.EmersonIndustrialAutomation.com](http://www.EmersonIndustrialAutomation.com).*