

HPS - High Performance Standalone Permanent Magnet AC Motors



HPS Series permanent magnet (PM) synchronous AC motors deliver IE4 “Super Premium” energy efficiency while reducing motor size and weight by up to 50%. The HPS Series combines the cost-effective mechanical design of an induction motor with the high performance, energy efficient brushless servo motor design. This uniquely engineered product was inspired and made possible by decades of Lafert experience and expertise in the design and manufacture of both motor types.

Application targets for the HPS Series are motor-driven HVACR equipment including pumps, fans, compressors and blowers, where system operating costs, size and weight are key design considerations. The IE4 Super Premium energy efficiency achieved by HPS Series motors deliver significant energy savings in comparison to NEMA Premium induction motors. The energy efficient performance of HPS Series motors allows equipment manufacturers to exceed governmental minimum energy performance standards (MEPS) and reduce ownership costs.



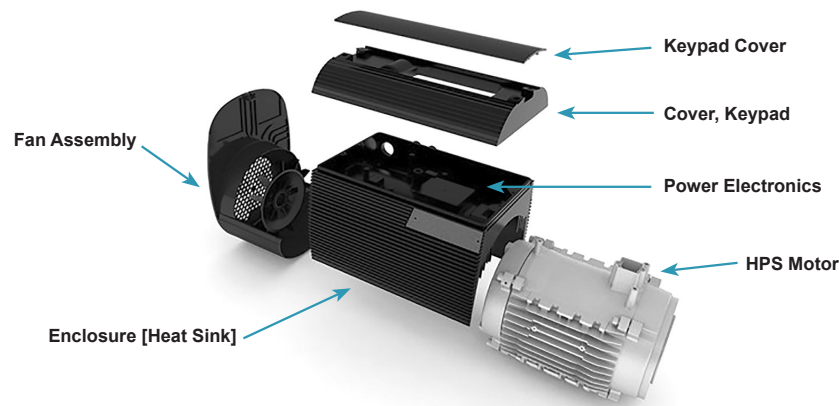
- Increased Power Density Reduces the Motor Frame Size up to Two Sizes
- Reduction of up to 50% in Dimensions, Space Envelope & Weight Compared to Other Aluminum-Bodied Motors
- Higher Space & Weight Savings Compared to NEMA Premium Efficient Motor Designs (with Rolled Steel or Cast Iron Construction)
- Manufactured Since 2005 in Italy in Accordance to the ISO 9001 Quality System
- 0.55 – 30 kW to Catalogue Standard or Custom-Build Specifications in Volume Production
- UL Recognized (cURus) & CE marks; Acceptable for use in the United States, Canada & Other Jurisdictions which Recognize Approvals

HPI Series - High Performance Integrated Permanent Magnet AC Motors with Frequency Drive

The HPI Series combines high performance HPS Series permanent magnet motors with matched variable frequency drives (VFD) to produce a seamlessly integrated motor and drive solution. The on-board Lafert drive technology and control interface deliver optimized system performance and energy efficiency, without costly and time-consuming integration of discrete motors and drives.

- Space & Weight Savings up to 50% Relative to Equivalent EISA Premium Efficient Motors
- Includes IE4 Super Premium Efficient HPS Series Motor
- Design eliminates enclosure requirement or frequency drive
- High Performance Sensorless AC Vector Control
- On-board Digital Analog I/O & Communications (Modbus RTU, RS 232, CANopen)
- Optimized for HVACR Applications

The HPI Series is available to equipment manufacturers for high volume applications (>1,000 units/year). Lafert offers HPI Series products with the option and capability to customize the control, electrical and mechanical design to customer specification. Please visit the Lafert North America website or contact our Outside Sales team for more information.



Lafert Brushless Servo Motors

Industry-leading Lafert expertise in production and design of permanent magnet motor technology has its foundation in twenty-five years of brushless servo motor manufacturing. A complete range of AC servo motors are manufactured to customer specifications at our Italian facility for applications such as material handling, packaging, precision manufacture and robot applications.

- Standard Range Includes Rated Torque (0.25 - 390+ Nm) & speed (0 - 6000+ rpm)
- Available Sensorless or with Resolver, Absolute or Incremental Encoder, Synchro
- High Overload, Dynamic Performance, Power Density
- Forced Ventilation (Fan Cooled) & Brake Motor Executions
- Torque Motor (“pancake”) Design for Direct-Drive Applications
- Standard or Optional Marks and Approvals Include CE, UL & ATEX Zone 2, 22 (Hazardous Location)

Lafert North America provides replacement support for current and legacy Lafert brushless servo motors. Contact a Lafert sales representative for new servo motor applications.

