



# News Release

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## **Sensorless control of permanent-magnet AC motors helps save energy and space in industrial applications.**

**Littlehampton (UK), September 30th, 2009 – Parker Hannifin SSD Drives Europe Division** has introduced a range of simple AC drives for permanent-magnet motors up to 7kW. Used with permanent-magnet AC motors without speed sensors, the AC650S series offer many benefits including energy savings and compactness when compared to conventional solutions based on induction motors. Target applications include fans, pumps, compressors, conveyors and machine-tools.

### **Energy savings with permanent-magnet motors is now affordable.**

Inherently more efficient than induction motors, permanent-magnet motors are still less common in the industrial world because they used to require a position sensor and a high-end drive. The difference in efficiency between the two motor technologies is typically in the range of 6% in favour of the PM motor technology, which equates to significant energy savings for industrial motors often running round-the-clock.

With its innovative control algorithm, the AC650S series breaks new grounds in motor control technology. Precise speed control of brushless AC motors is now possible with an entry-level drive, which makes economically attractive the usage of permanent-magnet motors instead of induction motors in many industrial applications. The absence of position or speed feedback strengthens even more the economic equation.

### **The AC650S series saves space in industrial applications**

Compactness is another advantage of permanent-magnet motors over induction motors, which once came only at a significant premium because a high-end drive in closed-loop control was mandatory to run the PM motor. Thanks to the AC650S innovative sensorless control technology, that benefit is now available in common

general purpose industrial applications like pumps, fans, compressors, conveyors and machine tools. The AC650S drive itself is extremely compact and can fit easily in small cubicles.

### **Easy installation and commissioning.**

The AC650S drive comes with preset parameters which are suitable for the most common applications. Only a couple of motor parameters have to be set during the commissioning, which makes it child's play. A free configuration tool is provided with a wizard, allowing fine tuning of the drive for optimum performance in demanding applications. The integration of the drive in existing systems is easy thanks to its Profibus-DP and Modbus RTU option interfaces.

The AC650S series is the best drive solution for the popular Parker AC brushless NX motors and ATEX EX series.

### **About Parker Hannifin Corporation (NYSE:PH)**

With annual sales exceeding \$10 billion, Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems, providing precision-engineered solutions for a wide variety of mobile, industrial and aerospace markets. The company employs approximately 52,000 people in 48 countries around the world. Parker has increased its annual dividends paid to shareholders for 53 consecutive years, among the top five longest-running dividend-increase records in the S&P 500 index. For more information, visit the company's web site at <http://www.parker.com>, or its investor information site at <http://www.phstock.com>.

Parker SSD Drives Europe Division provides a full range of highly innovative products, including AC, DC, servo drives and motors in the range of fractional kW to 1500kW, based on the sound principals of ease of use, global standards, and above all, reliability.

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### Pictures

