

**NEWS** RELEASE



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## **YASKAWA RECOGNIZED BY IEEE**

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**Waukegan, Ill.** – Yaskawa Electric America, Inc. has become accustomed over the years for their ability of accomplishing firsts. One example of this came in 2004, when Yaskawa became the first manufacturer in the world to commercialize and unveil the inaugural matrix converter based AC motor controller.

This new innovation allowed technology to take another step forward by offering efficient operation in all four quadrants. It is also the first of its kind to directly convert input AC voltage to output AC voltage without the need for a DC bus. For their time, hard work and dedication, Yaskawa was awarded the 2004 Frost and Sullivan Excellence in Technology Award for this outstanding achievement.

Now four years later, several Yaskawa associates are responsible for receiving more recognition for their article on the same converter. The paper that was honored for its contents is the “Integrated Filters and Their Combined Effects in Matrix Converter,” written by Yaskawa’s own Mahesh Swamy, Tsuneo Kume, Kenji Yamada, Tsuyoshi Higuchi, Eiji Yamamoto, Hidenori Hara and Toshihiro Sawa.

The paper first appeared in the March/ April 2007 edition of IEEE’s Transactions on Industry Applications. It was later honored for its content by being selected as the

Honorable Mention Award. The award will be presented to Yaskawa as part of the IEEE IAS annual meeting slated for Oct. 5-9, 2008 in Edmonton, Alberta, Canada.

The paper recognizes the fact that the matrix converter lends itself to easier filtering. By intelligently combining output sine wave filter with common mode filter, it shows that the size and structure of the input EMI filter can be significantly reduced to achieve an environmentally harmonious solution that has sinusoidal input current and sinusoidal output voltage in all four quadrants of operation. In addition, the resulting drive system has lower electromagnetic interference (EMI), lower common-mode current, and lower shaft voltage, all combined in an optimally integrated package.

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Yaskawa Electric is the world's largest producer of AC drives, servomotors, motion controllers, and robotics. The drives business of Yaskawa Electric America, Inc. operates from facilities in New Berlin, Wis.; Waukegan and Buffalo Grove, Ill.; Los Angeles, and offices throughout the Americas.