



## 700 Ton Daikin McQuay “Magnitude” Magnetic Bearing Centrifugal Chiller Previewed at AHR

**Chiller Reduces Total Cost of Ownership with Efficient, sustainable Performance and Low Maintenance Costs**

LAS VEGAS, Jan. 31, 2011, PRNewswire/January 31 - February 2, 2011.



The new 700 ton Daikin chiller is an extension to the Magnitude line of ultra-efficient magnetic bearing centrifugal chillers.

At AHR in Las Vegas today, McQuay/Daikin previewed the new 700 ton Daikin “Magnitude”™ centrifugal chiller. Already known for its oil-free, magnetic bearing design, the new model is an extension to the company's popular line of energy efficient chillers branded, Magnitude. The chiller is ideal for use in universities, hospitals, manufacturing facilities and data centers.

With proven industry-leading efficiency, sustainable performance, and low sound levels, thousands of Magnitude chillers are installed around the world. They help owners reduce energy and operating costs, create a comfortable environment and meet requirements for sustainable design, such as Leadership in Energy and Environmental Design (LEED®) certification criteria.

"The larger 700-ton units are a natural evolution of magnetic bearing compressor technology and make the benefits of this technology available to a larger range of applications," said Ray Good, director of chiller product management for Daikin Applied. "This oil-free technology increases reliability and reduces maintenance because there are no conventional bearings and hence no oil management system and associated maintenance costs. In a typical chiller, oil builds up in the evaporator, reducing energy efficiency up to 15 percent. As a result of its higher sustainable operating efficiency and reduced maintenance, the Magnitude chiller delivers a lower cost of ownership compared to conventional centrifugal chillers."

With its positive pressure, oil-free design, the ultra-efficient performance of the Magnitude chiller is sustainable through its operating life because there's no oil to contaminate the refrigerant and degrade system efficiency.

By eliminating the high friction losses of conventional centrifugal compressors, the Magnitude chiller achieves exceptional full and part-load performance. Part-load IPLV for the 700-ton unit is as low as 0.306kW/ton, while maintaining world-class full load efficiency 0.532kW/ton.

For building owners who want to pursue LEED Green Building Certification, the Magnitude chiller can be part of practical and measureable green building design, construction, operation and maintenance solutions. Using R-134a refrigerant, the Magnitude chiller has no ozone depletion potential or phase-out schedule. The 400 to 700-ton Magnitude chiller earns two LEED points for Energy and Atmosphere Credit 4, *Enhanced Refrigerant Management*. In addition, its energy efficient performance may contribute to LEED Energy and Atmosphere Credit 1, *Optimize Energy Efficiency*, in which one to 19 points are possible.

The Magnitude chiller line has been tested and International Building Code (IBC) certified for seismic installations to remain online and functional after an event. For critical health facility buildings in California, Magnitude chillers have also received the more rigorous Office of Statewide Health Planning and Development (OSHPD) Special Seismic Certification Pre-approval. IBC and OSHPD certification pre-approvals save time and money on projects by reducing design time and speeding the commissioning process.



**For more information about Daikin's breadth of chiller options including the entire line of Magnitude chillers call:**

**Matt Duncan at Mason & Barry**

**Phone: (304) 755-0781**

**Text: [mduncan@masonbarry.com](mailto:mduncan@masonbarry.com)**