**Magnitude® Magnetic Bearing Chillers**

100 to 1500 tons

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**Delivering the Energy Savings that Building Owners Demand**

When it comes to saving energy, Magnitude is up to 40% more efficient than standard centrifugal chillers and can save owners up to $4 million over the life of the chiller.

**Quietest Chiller in its Size Range**

With sound pressure ratings as low as 76 dBA tested per AHRI Standard 575, the Magnitude chiller is the quietest chiller in its size range. Sound levels will be even lower at reduced loads and non-standard design conditions.

**Magnetic Bearing Compressors - Technology for Today**

Magnetic bearing technology eliminates oil, bearing wear surfaces, and gears for longer machine life and increased reliability. Facility managers can bank on their chillers running at peak efficiency year after year with a design that wipes out the risk of contamination from efficiency-robbing oil buildup on to heat-transfer surfaces.

**Technology that keeps you cool and online**

Staying cool cannot be compromised in mission critical facilities like hospitals or data centers – even if the power fails. With RapidRestore® and RideThrough® solutions, a Magnitude chiller can restart as fast as 43 seconds after power is restored.

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**Compact Size for Installation Cost and Time Savings**

The compact size of the Magnitude chiller is ideal for replacement and energy upgrade projects as well as multiple chiller installations. When using compact, ultra-efficient Magnitude chillers to replace older, larger and less efficient chillers, the space savings can add up as quickly as the energy savings. For installations with access constraints, various models can fit through a standard 36-inch door with the simple removal of the electrical panels which keeps the refrigerant circuits intact. Factory disassembly options can be another solution to even more challenging projects.
Peak Efficiency Year After Year

**Lowest Total Cost of Ownership**

**Reduced life cycle cost.** The operating and maintenance costs of a standard chiller can often range from 10 to 15 times the initial purchase price of the chiller. Magnitude chillers often reduce this ratio to four or less, resulting in payback periods as low as one or two years.

**Magnetic bearing centrifugal compressor** eliminates the efficiency-robbing friction inherent in traditional centrifugal chillers.

**Integrated VFD** optimizes part load efficiency, a key performance feature since most chillers operate at part load 99% of their life.

**Sustainable performance.** The positive pressure, oil-free design eliminates performance degradation due to non-condensables and oil contamination of the refrigerant.

**Easy integration** with our Open Choices™ feature using BACnet®, LonWorks® or Modbus® communications without an expensive gateway panel.

**R-134a refrigerant** has no ozone depletion potential, low global warming potential and high efficiency.

**Small unit footprint** helps the Magnitude chiller fit in buildings where space is limited, making it ideal for retrofit projects.

**Reduced maintenance** costs due to elimination of the oil, oil system, purge system, and shaft seals found in older technology chillers.

**Unmatched unloading** with the integrated VFDs since the on-board digital controls reduce compressor speed to match the load.

**Low inrush current at startup** is ideal for operation with backup or emergency power systems.

**Touch screen operator panel** is graphically intuitive and easy to use for enhanced operator productivity. Important status and control information is available at a glance or a touch.

**Seismic compliance** with both IBC seismic certification standards and OSHPD pre-approval.

**LEED® points** can be earned from the Magnitude chiller’s performance in two categories: EAc1, up to 19 points possible, and EAc4, 2 points.