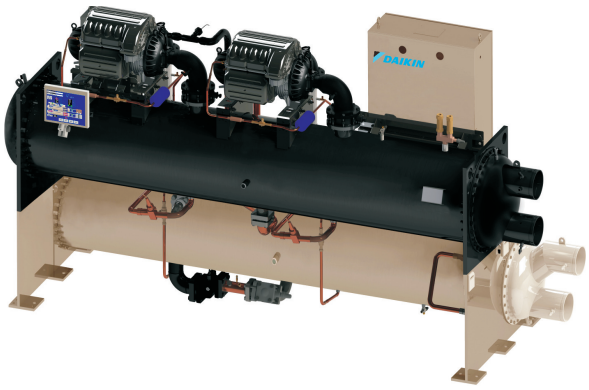
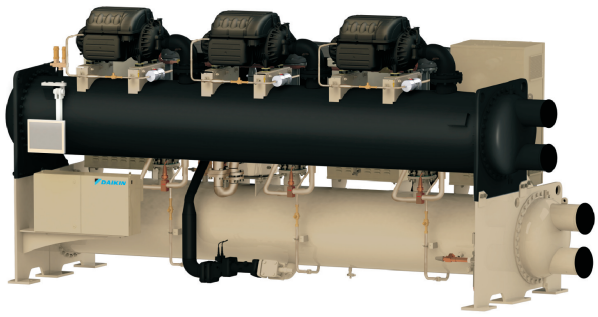
DAIKIN

PM-HTMXE-E001

HTMXE
MAGNETIC BEARING CENTRIFUGAL CHILLER

Cooling Capacity: 150~550RT





GB/T 19001
CQM-42-1998-0263-0001
MANAGEMENT SYSTEM
CNAS C002-M
ISO9001

GB/T 24001
CQM-42-1998-0263-0002
MANAGEMENT SYSTEM
CNAS C002-M
ISO14001

GB/T 28001
CQM-42-1998-0263-0003
MANAGEMENT SYSTEM
CNAS C002-M
OHSAS18001

TESTING
CNAS L7576

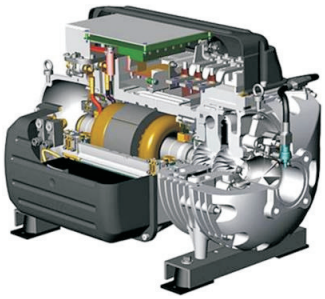
XK06-015-00425

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www.ahridirectory.org
Water-Cooled Water Chilling and
Heat Pump Water-Heating Packages
AHRI Standards 550/590 and 551/591

TECHNOLOGY FEATURES

Magnetic bearing compressor

- The magnetic bearing chiller exceptional efficiency and reliability is due to its cutting-edge permanent magnet motor and magnetic bearing compressor technology. A digitally-controlled magnetic bearing system replace conventional oil lubricated bearings and a direct drive motor eliminate the need for a lubricated gear box. Sensors at each magnetic bearing provide real-time feedback to the bearing control system. As a result of this sophisticated design magnetic bearing chiller has many advantages over chillers with traditional centrifugal compressors.



Oil free

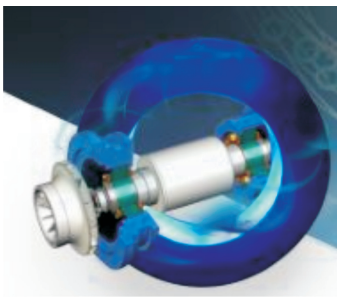
- The only moveable components of compressor are rotor and inlet guide vane, which fully demonstrated zero contact points. This design avoids the complex oil system, oil leakage, oil change issues. It complete eliminate the oil affects.

※No oil system=Reduced maintenance cost

※Totally oil-free operation= Greater Efficiency

※No oil loss=Sustainable Performance

※No oil system=Low vibration & sound levels



VFD Technique

- A Variable Frequency Drive (VFD) modulates compressor speed in response to load and evaporator/Condenser pressure. When minimums speed is reached, moveable inlet guide vanes redirect the gas flow into the impeller. The magnetic bearing chiller fully integrated VFD technology to optimize chillers performance at different conditions with COP up to 6.6 and IPLV up to 12.3. The magnetic bearing chiller could save more energy than traditional centrifugal chillers.

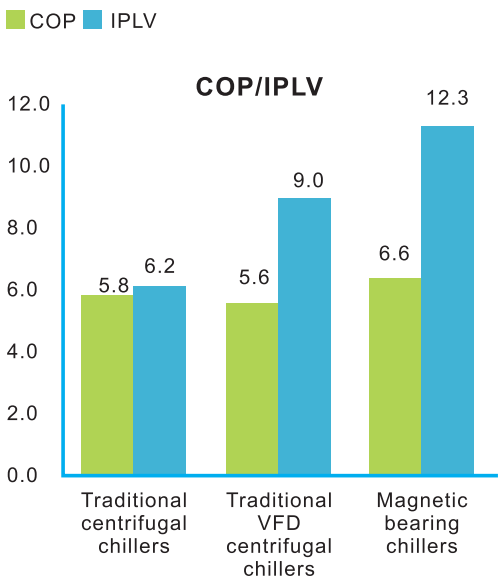
VFD's have following benefits:

•Reduced annual energy costs when there are long periods of part load operation and/or low compressor lift

•Reduce motor starting inrush current

•Reduce size of backup generators used to provide emergency power to chillers used on mission critical applications

•Increased power factor to reduce utility surcharges.

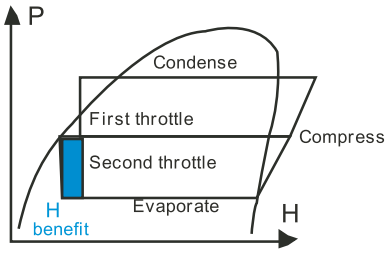


Notes:Above data base on AHRI condition

TECHNOLOGY FEATURES

Patent Flash Economizer

- The magnetic bearing chiller adopts flash economizer with unique paten technology. The economizer configure a build-in ball float valve throttle the refrigerant second time. There is no heat difference comparing with the normal heat exchanger. This design effectively improves the chiller efficiency.

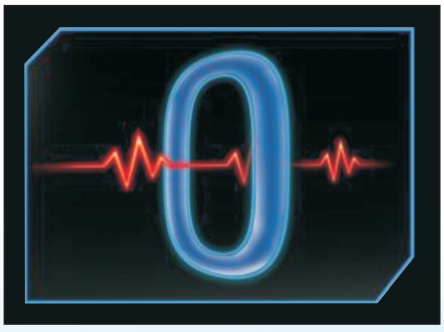


Low noise and compact structure

- No oil pump, oil filter and evaporator filter which makes the magnetic chiller becomes very light and compact. This remarkable features helps to save more spaces and provides convince to the operators and maintenance.
- No mechanical noise makes the magnetic chiller becomes the quietest chiller
- No vibration which means no need expensive anti-vibration treatment.



RapidRestore



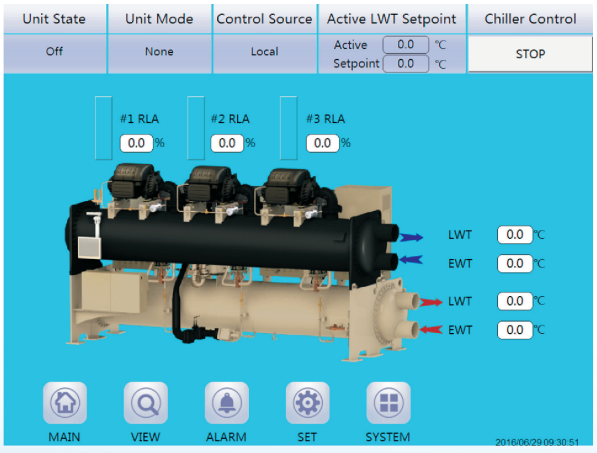
- Mission critical facilities such as data center and hospitals are demanding stringent capabilities for chillers to restart and reach full load operation quickly in the event of a power loss. VFD converter could ensure the chiller rapid start and stop, no need to wait the system download the oil circuit and oil return. The magnetic chiller configured the IPS capacitor therefore no need separated UPS. IPS could continuously supply the power to the magnetic bearing when power off. Therefore the chiller could rapid start when the power suddenly cutting off.

Easy Control

- Magnetic bearing chiller provides functional and easy operating control system. MicroTech applied the latest Micro Process tech and configured large color touch screen. MicroTech controller includes microprocessor which provides all monitor and control function for the efficient and safety operation.

In order to track chiller performance, MicroTech controller can record and plot water temperatures, refrigerant pressures and motor load. There values can be downloaded through a convenient USB port in the interface and exported into a spreads sheet for further evaluation and record purpose

The controller memory also retains the fault history for troubles shooting and monitoring unit performance. A time/date stamps is associated with each fault. The fault history can be downloaded through USB port.



Cautions on product corrosion

1.The units should not be installed in areas where corrosive gases,such as acid gas or alkaline gad,are produced.
2.If the unit is to be installed close to the sea shore,direct exposure to the sea breeze should be avoided.If you need to install the unit close to the sea shore,contact your local distnbbutor.

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