

Your Choice to Save Energy and Installed Costs

McQuay Single Compressor Centrifugal Chillers

80 to 1250 Tons



Engineered for flexibility and performance.™

McQuay[®]
Air Conditioning

McQuay Single Compressor Centrifugal Chillers

Saving energy and installed costs

Centrifugal chillers are a significant investment in your building system. You need a chiller that offers a return on that investment throughout its life cycle. Whether your system is air conditioning or process cooling, new construction or renovation, McQuay centrifugal chillers are the right choice with real benefits for your bottom line.

- **Energy savings** with superior part load efficiency of .365 kW/ton IPLV for a 500-ton chiller with variable frequency drive
- **Lower installation costs** with the smallest footprint in the industry to optimize equipment room space
- **Easy to retrofit** with bolt-together construction for easy disassembly and re-assembly at the job site
- **Lower maintenance costs** because the positive pressure design does not require a purge system or annual oil or filter changes
- **Easy to integrate** MicroTech II™ controls with our Protocol Selectability™ feature allow integration with your BAS of choice using BACnet®, LONWORKS®, or Modbus® communication, without the need for expensive gateway panels
- **Easy to operate** with a color touch screen operator panel for monitoring and control of chiller performance



LONMARK® 3.3

BMA™ BACnet
MANUFACTURERS
ASSOCIATION



Open standard
protocol network
such as BACnet,
LONWORKS
or
Modbus

**Building Automation System Of
Your Choice!**



McQuay centrifugal chillers with MicroTech II controls are easy to integrate with your building automation system of choice using BACnet, LONWORKS or Modbus communication. Unit controllers are LONMARK® certified with an optional LONWORKS® communication module.

Features that benefit your bottom line

Positive Pressure R-134a Design

- Sustainable performance for the life of the chiller
- No refrigerant phase-out or availability issues
- Eliminates annual oil change and filter replacement
- No purge unit required

Quiet Compressor Design

- Unique refrigerant injection system absorbs sound energy
- Movable discharge geometry increases stability at low loads
- Reduced sound levels at part load

Variable Frequency Drive Option

- Improves part load energy efficiency
- Reduces annual energy costs

MicroTech II Controls

- For stand-alone operation or integration with a building automation system
- Color touch screen operator panel
- Control of pumps and cooling tower
- History and trend data

Gear Drive Compressor

- Quiet operation
- Extremely low vibration levels
- Extended durability with unique hydraulic bearings



Service Friendly Design

- Refrigerant charge stored in condenser for easy servicing

Standard Bolt-Together Construction

- Allows for easier field disassembly and re-assembly
- Facilitates the difficult rigging work often associated with retrofit installations

Compact Compressor Design And Unique Shell Configuration

- Provides the smallest footprint per ton in the industry
- Fits in most tight equipment rooms

Power Failure Coastdown Protection

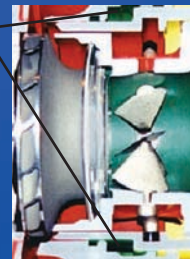
- Lubricated compressor coastdown
- Protects bearings from damage after a power failure



A compressed spring pressurizes an oil reservoir in the compressor, providing force to lubricate bearings in a coastdown.

Excellent Unloading Capability

- Compressor unloading down to 10% without hot gas bypass
- Movable discharge diffuser increases stability and reduces vibration



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Efficient R-134a Refrigerant

Designed for Sustainability

With McQuay's positive pressure design utilizing R-134a refrigerant, performance is sustainable for the chiller's life. In positive pressure designs all components operate above atmospheric pressure. In contrast, negative pressure designs using refrigerants such as R-123 have some components that operate in a vacuum. This vacuum allows air and moisture to seep into the refrigeration cycle, which can significantly hurt performance. Removing air and moisture from a negative pressure chiller requires a purge system consisting of a small compressor, condenser and storage tank. This purge system can add substantial maintenance costs to a chiller system.

McQuay's centrifugal chiller gives you the following benefits

- The chiller does not require a purge system, lowering your maintenance costs, increasing reliability and lowering operating costs.
- The positive pressure design eliminates leakage of moisture or air into the chiller providing efficient performance that is sustainable for the life of the chiller.
- It uses environmentally friendly R-134a refrigerant which has no scheduled phase-out date, which can lower your costs because of the longer availability compared to R-123 refrigerant.
- It does not require "off cycle" heating equipment, which eliminates power consumption when your unit is off, saving operating costs.
- It does not require annual oil or filter changes, lowering your maintenance costs.
- R-134a has an A1 safety rating (lower toxicity) in ASHRAE Standard 34 compared to a B1 rating (higher toxicity) for R-123 chillers. R-134a is safer and less toxic.



McQuay International delivers engineered, flexible solutions for commercial, industrial and institutional HVAC requirements with reliable products, knowledgeable applications expertise and responsive support. McQuay products and services are provided through a worldwide network of dedicated sales and service offices.

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