



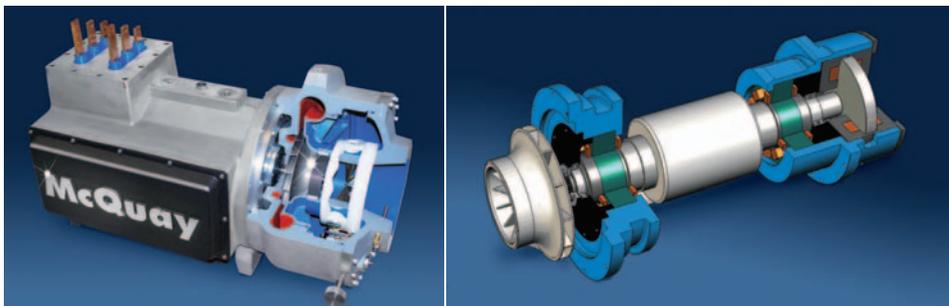
THE INSIDE STORY ON INNOVATION, BY THE REFRIGERATION EXPERTS.



MAGNETIC BEARING CENTRIFUGAL-COMPRESSOR



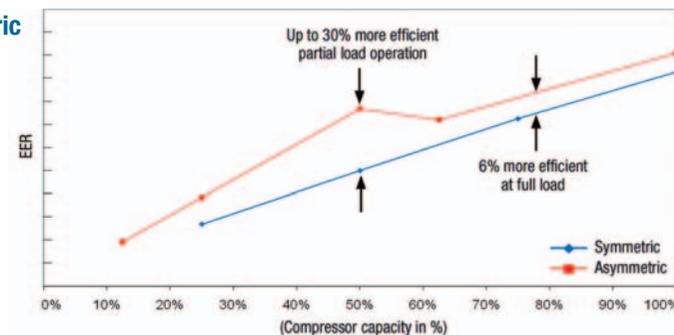
McQuay Centrifugal-Compressors are the market leader since 1954 with respect to ecology, efficiency and reliability. McQuay now presents the latest development, a magnetic bearing, semi-hermetically sealed compressor with speed controlled direct drive. The compressor impeller is directly coupled to the drive shaft. The magnetic bearings reduce the drive side power losses by about 8%. The power capacity is regulated by a frequency converter in combination with continuously variable guide vanes. Due to its semi-hermetic design and the refrigerant-cooled drive motor with magnetic bearings, no mechanical enclosure openings are necessary. Combined with excellent heat exchangers, McQuay will soon be offering, in addition to the already established WMC series which has over 1,000 installations, the advanced and improved WME range. This provides the incomparable full load EER 6.5 and a partial load ESEER of 10.3.



ASYMETRIC CONTROL

The proven McQuay Single Screw assures reliability, smooth running and efficiency. Since refrigeration units operate most of the time at partial load, McQuay has improved good technology with its new patented power control. Up to 30% better efficiency at partial load and 6% at full load. While single-rotor screw compressors have only one compression range and a power slider, the McQuay screw compressor has two compression areas, in which two power valves are integrated. In power-regulated operation the compressor efficiency decreases significantly. Since the McQuay power control works asymmetrically, this effect, to say it simply, is halved.

Asymmetric and Symmetric





McQuay has always been a leader, constantly improving the development of new technologies and optimizing energy efficiency and reliability, as well as reducing installation, operating and maintenance costs.



INTEGRATED “FREE COOLING”

Compact air-cooled chillers have been perfected by McQuay and are second to none. Cooling capacities from 4.6 to 2008 kW per unit, 3 noise and efficiency categories, additional heat recovery condensers and a variety of other options, round out the product range. The AWS series is now available up to a cooling capacity of 1,349 kW with integrated “Free cooling” and with or without system separation. These chillers offer huge savings and increased reliability for year-round cooling requirements. The amortization for the added expense of “Free cooling” is generally less than 2 years.

PROXIMUS EVOLUTION R 410a CHILLER



Proximus Evolution is McQuay’s intelligent response to customer demand for an extremely inexpensive and yet efficient chiller. Proximus Evolution meets this requirement with flying colors. Thanks to the two opposite compression areas of the McQuay mono screw compressor, the radial and the axial bearing forces cancel each other out to a large extent. Therefore, this compressor is ideal for use with the refrigerant R 410a and its considerably higher pressure requirements. The advantage of R 410a is the more than twice as high volumetric cooling capacity compared to R-134a. Proximus Evolution offers the best value in the market for chillers.

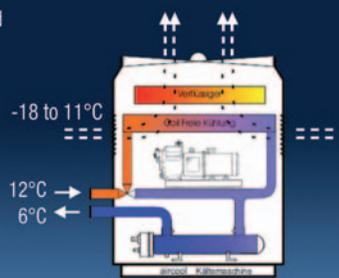


Free cooling and mixed mode operation

5,000 h/a

Compressor operation

3,760 h/a



YOU HAVE THE CHOICE – WE HAVE THE SUITABLE REFRIGERATION UNIT:

Air to Water Heat Pump						
	Minichiller R-410A Rotary Compressor Qo: 4.61 - 13.2 kW Qh: 6.30 - 16.1 kW	Minichiller Inverter R-410A Scroll Compressor Qo: 20.5 - 58.6 kW Qh: 22.0 - 61.5 kW	Minichiller R-407C Scroll Compressor Qo: 21.7 - 38.1 kW Qh: 26.40 - 42.2 kW	McSmart Scroll Compressor Qo: 47 - 145 kW Qh: 55 - 158 kW	McEnergy HPI "Extension" Screw Compressor Qo: 254 - 538 kW Qh: 270 - 615 kW	
Air-Cooled Chiller						
	McSmart Scroll Compressor Qo: 48 - 155 kW	McEnergy Mono Screw Compressor Qo: 98 - 413 kW	McEnergy Evolution Screw Compressor Qo: 177 - 622 kW	McEnergy Inverter Screw Compressor Qo: 329 - 515 kW	AWS Screw Compressor Qo: 619 - 2.008 kW	
Water Cooled Chiller						
	Ecoplus Screw Compressor Qo: 161 - 604 kW	PFS Screw Compressor Qo: 339 - 1,150 kW	WHS E Screw Compressor Qo: 328 - 1,510 kW	Proximus Evolution Screw Compressor Qo: 378 - 2,196 kW		
						
	WMC Frictionless Centrifugal Compressor Qo: 317 - 1,048 kW	WME Frictionless Centrifugal Compressor Qo: 1,400 - 2,000 kW	WSC Single Centrifugal Compressor Qo: 760 - 4,500 kW	WDC Dual Centrifugal Compressor Qo: 1,300 - 9,485 kW		
Fan Coils						
	MF Vertical Qo: 1.2 - 8.3 kW Qh: 2.2 - 13.0 kW	MCK Cassette Qo: 2.64 - 10.8 kW Qh: 3.42 - 13.8 kW	MCW/MCC Ceiling Concealed Qo: 2.20 - 15.8 kW Qh: 2.40 - 19.6 kW	MDB Large Ducted Qo: 2.24 - 44.0 kW Qh: 22.9 - 49.8 kW	MWM Wall Mounted Qo: 2.34 - 5.28 kW Qh: 3.02 - 6.74 kW	MCM Ceiling Convertible Qo: 4.54 - 13.2 kW Qh: 5.72 - 15.1 kW

McQuay
International

aircool is an authorized
McQuay distributor.

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