

Centrifugal Compressor Water Chillers—125 to 2700 Tons

- R-134a refrigerant with no ozone depletion potential and no phase-out schedule
- Smallest footprint per ton in the industry to optimize equipment room space
- Controls flexibility—MicroTech II® controls with our Protocol Selectability™ feature for easy, low cost integration with the BAS of your choice
- Variable speed drives help to provide superior part load performance IPLV (WDC, WCC, and WSC models).
- Cost-effective alternative to rotary screw compressor chillers (WPV model)
- Dual compressor chiller models offer efficiency choices: WDC for superior part load efficiency and WCC for exceptional full load efficiency

For more detail, refer to Catalog WSCWDC and Catalog WPV. For the most current information, refer to www.mcquay.com.



WPV single compressor water-cooled centrifugal chiller—220 to 430 tons



WDC dual compressor—single circuit water-cooled centrifugal chiller—250 to 2500 tons



WSC single compressor water-cooled centrifugal chiller—125 to 1250 tons

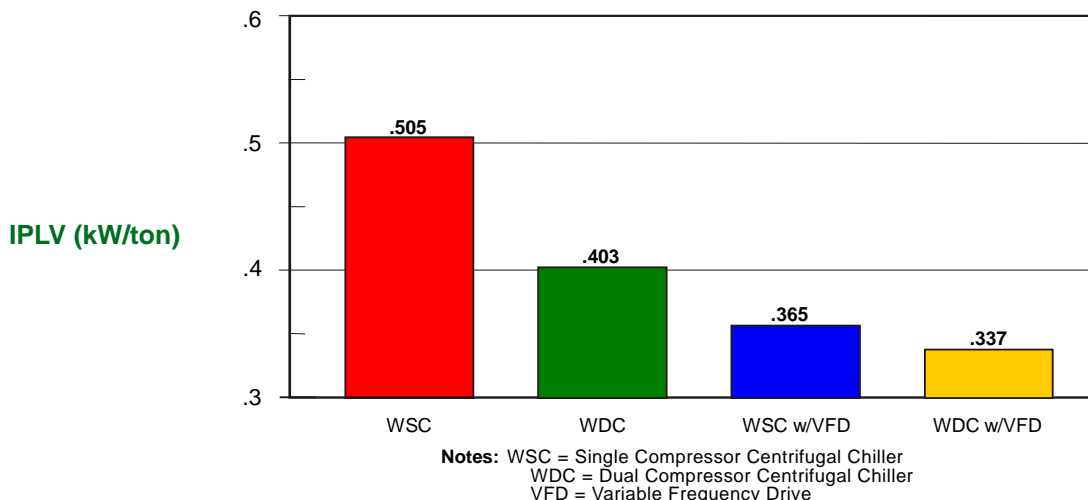


WCC dual compressor—dual circuit water-cooled centrifugal chiller—1200 to 2700 tons



Available LONMARK certified

Relative IPLV efficiencies of various McQuay options for 500-ton selection.



Capacity and Physical Data

WSC Series Single Compressor Chiller

Chiller model	Nominal capacity tons (kW)	Dimensions (in)			Max. unit operating weight (lb)
		Maximum length	Maximum width (w/o starter)	Maximum height	
WSC 050	125–150 (437-525)	169 (4293)	42 (106)	71 (1803)	10172 (4614)
WSC 063	160–300 (560–1050)	175 (4445)	96 (2438)	96 (2438)	16769 (7606)
WSC 079/087	300–600 (1050–2100)	175 (4445)	80 (2032)	105 (2667)	24999 (11340)
WSC 100/113/126	600–1300 (2100–4550)	181 (4597)	104 (2642)	106 (2692)	43017 (19513)

WDC and WCC Dual Compressor Chiller

Chiller model	Nominal capacity tons (kW)	Dimensions (in)			Max. unit operating weight (lb)
		Maximum length	Maximum width (w/o starter)	Maximum height	
WDC 050	250–320 (875-1120)	218 (1131)	44 (1131)	85 (2149)	19043 (8638)
WDC 063	320–600 (1120–2100)	221 (5623)	64 (1619)	90 (2280)	28815 (13070)
WDC 079	600–700 (2100–2450)	224 (5698)	74 (1865)	106 (2686)	38515 (17470)
WDC 087	700–1200 (2450–4200)	224 (5698)	74 (1865)	106 (2686)	39875 (18087)
WDC100/113/126	1200–2700 (4200–8750)	230 (5848)	110 (2792)	116 (2956)	68996 (31296)
WDC100/113/126	1200–2700 (4200–9450)	278 (7071)	104 (2651)	110 (2084)	65806 (29875)

Notes: Lengths in inches (mm), weight in pounds (kg)

WPV Single Compressor Centrifugal Chiller

Chiller model	Nominal capacity tons (kW)	Dimensions (in)			Max. unit operating weight (lb)
		Maximum length	Maximum width (w/o starter)	Maximum height	
WPV 240	220–240 (770–840)	135	60	75	10,900
WPV 250	250 (875)	135	60	75	11,000
WPV 280	260–280 (910–980)	171	61	79	13,500
WPV 290	290 (1015)	171	61	79	13,700
WPV 320	300–320 (1050–1120)	171	61	79	13,900
WPV 350	330–350 (1155–1225)	171	61	79	14,100
WPV 390	360–390 (1260–1365)	171	61	79	14,200
WPV 410	400–410 (1400–4065)	171	61	79	14,300
WPV 430	420–430 (1470–1505)	168	71	87	17,100

Notes: All WPV units have starters as standard.

Centrifugal Compressor Water Chillers

Water-Cooled Chillers

MicroTech II controls

- Color touch screen operator panel
- Easy integration with most building automation systems

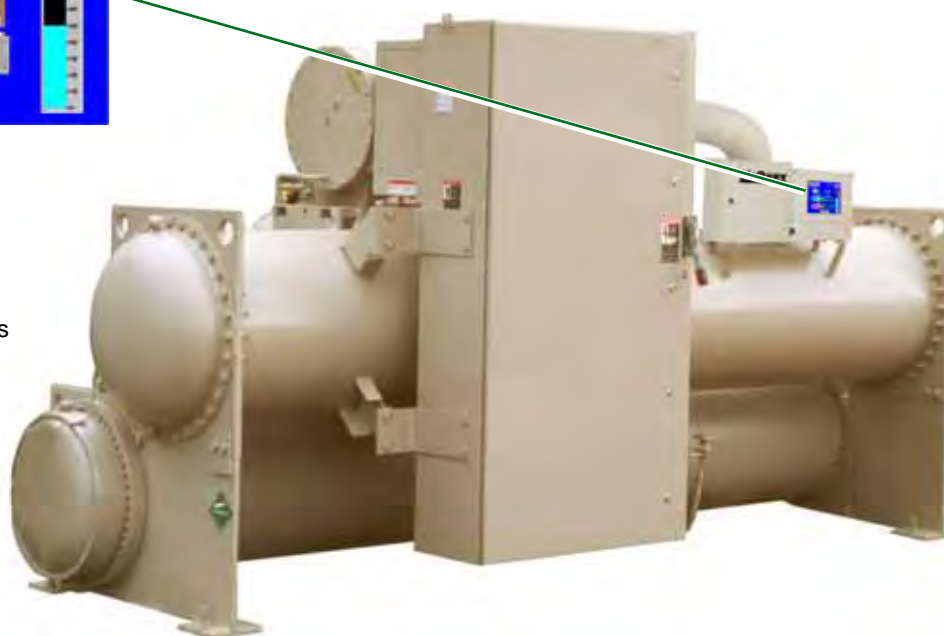


Positive pressure R-134a design

- Sustainable performance for the life of the chiller
- No refrigerant phase-out or availability issues

Variable frequency drive option

- Improves part-load efficiency
- Reduces annual energy costs



Standard bolt-together construction

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

Compact design

- 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



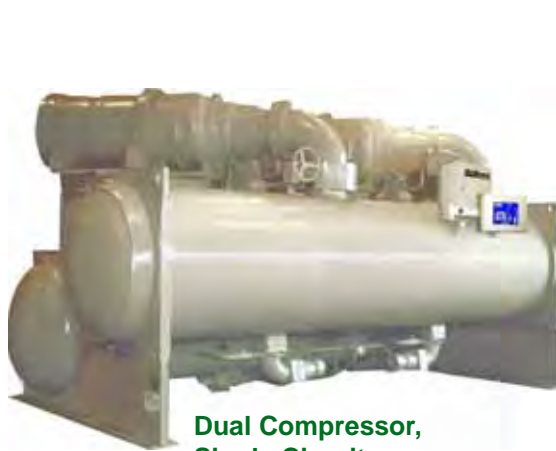
A compressed spring pressurizes an oil reservoir in the compressor, providing force to lubricate bearings in a coastdown.

Excellent unloading capability

- Compressor unloading down to 5% without hot gas bypass (Models WDC and WCC)
- Movable discharge diffuser increases stability and reduces vibration



Dual Compressor Centrifugal Chiller



**Dual Compressor,
Single Circuit**



Dual Compressor, Dual Circuit

All the features and benefits of the single compressor models *plus*:

- Single circuit parallel-flow model provides superior part load efficiency, especially with optional variable frequency drives
- Dual circuit series-counterflow model delivers exceptional full load efficiency
- Automatic backup with at least 60% of the chiller design capacity available on single circuit units and 50% on dual circuit units
- Positive pressure R-134a design has a significantly smaller footprint than R-123 designs