

Aqua Series® Water-Cooled Chillers



16 to 3,400 Tons / 56 to 11,957 kW





Aqua Series® Water-Cooled Chillers — The Right Choice for Today and Tomorrow.



Carrier's comprehensive line of water-cooled chillers are designed to enable chiller plants to achieve superior efficiency at true operating conditions without compromising the environment.

These units boast integrated part-load values (IPLV) to 0.288 and full load kW/Tons to 0.505 while utilizing either HFC·134a, HFC/HFO·513A, HFC Puron® refrigerant (R·410A) or HFO·1233zd(E). Aqua Series water-cooled chillers are ideal for replacement or new construction with small footprints and easy disassembly options. The newest addition to the Carrier water-cooled chiller product line, the 19DV, utilizes HFO·1233zd(E), an A1 refrigerant. Carrier chillers are also manufactured in an award winning, LEED® certified plant.

LEADING EFFICIENCIES

Chillers operate at design conditions less than one percent of the time. As a result, superior part-load efficiency is required in today's chilled-water applications. AquaEdge 19DV, 19XRV and 23XRV chillers are equipped with a factory-installed, variable-speed drive, maximizing chiller efficiency by optimizing compressor operation. Electric power consumption drops dramatically when the motor speed slows. The 19DV and 23XRV deliver industry-leading IPLVs as low as 0.288 and 0.299, respectively. The 19DV pairs excellent full load and IPLV performance to reduce demand (peak kW) and energy (Kwh) consumption.

SEISMIC COMPLIANT*

With Carrier's special seismic-compliant package, the Aqua Series water-cooled chillers meet or exceed the California Office of Statewide Health and Planning Development (OSHPD) standards.

REVIT®

To save time and help support engineers and architects in more accurate design, construction planning and fabrication, Carrier is able to provide Revit® Building Information Modeling (BIM) drawings for their entire line of chillers.

Developed by Autodesk®, Revit BIM is a building design software which allows users to create multi-dimensional architectural models, evaluate building alternatives and work collaboratively before beginning construction. Carrier BIM objects are configured to the design and specifications of each piece of equipment.

BACNET® CAPABILITY

With a factory-installed integrated communication card, connecting Carrier water-cooled chillers to a BACnet® system has never been easier. Simply connect the UPC open to the BACnet network, and Carrier equipment is ready to integrate seamlessly into Carrier's i-Vu® open control system or any other BACnet building automation system. Pre-programmed to share equipment data, no onsite engineering is required.

HEAT RECOVERY*

Hot water can be generated efficiently by using the heat recovery capabilities of Carrier's 19DV and 30 series water-cooled chillers. Carrier chillers with heat recovery capabilities can produce chilled water controlled to the specified temperature while generating hot water as a byproduct of the refrigeration cycle.

Heat recovery captures energy that would otherwise be wasted to the atmosphere, thereby increasing overall system efficiencies. Unlike typical boilers with COPs (coefficient of performance) less than 1.0, capturing waste heat from a heat recovery chiller can result in COPs exceeding 5.0.

Registered trademarks are properties of their respective companies and are hereby acknowledged.

*Options available where applicable.



AQUAEDGE 19DV TWO-STAGE CHILLERS

- 350 to 800 Tons (1,231-2,814 kW)
- HFO-1233zd(E) refrigerant
- Heat recovery, free cooling, dual temperature duty and chilled water all in the same machine
- Back-to-back EquiDrive compressor
- Totally enclosed VFD

AQUAEDGE 19XR(V) SINGLE-STAGE CHILLERS

- 200 to 1,600 Tons (703-5,627 kW)
- HFC-134a or HFC/HFO-513A refrigerant
- Semi-hermetic motor
- ASME heat exchangers
- Factory installed VFD option

AQUAEDGE 19XR(V) TWO-STAGE CHILLERS

- 600 to 3,400 Tons (2,110-11,957 kW)
- HFC-134a or HFC/HFO-513A refrigerant
- Semi-hermetic motor
- ASME heat exchangers
- · VFD option
- · High lift and ice duty capability

AQUAEDGE 23XRV CHILLERS

- 175 to 550 Tons (615-1,934 kW)
- HFC-134a refrigerant
- Industry best part load performance
- Semi-hermetic motor
- IEEE-519 compliant VFD
- Patented compressor design reduces bearing loads -Greenspeed® intelligence

IPLV as low as 0.299



AQUAFORCE 30HX CHILLERS

- 75 to 265 Tons (264-932 kW)
- HFC-134a refrigerant
- Semi-hermetic motor
- Handheld Navigator
- Heat recovery capability up to 135°F (57.2°C)
- Dual independent refrigerant circuits standard
- Fits through standard doorway
- Low in-rush current
- · Condenserless option

AQUAFORCE 30XW CHILLERS

- 150 to 400 Tons (528-1,407 kW)
- HFC-134a refrigerant
- Semi-hermetic motor
- Marine waterbox option
- Single and dual independent refrigerant circuits available
- Factory installed heat recovery option up to 140°F (60°C)
- Reduced installation expenses

AQUASNAP 30MP CHILLERS

- 16 to 71 Tons (56-250 kW modules), manifold capability up to 550 Tons (1,934 kW)
- HFC Puron® refrigerant (R-410A)
- Reduced installation cost
- Small footprint (fits through a standard doorway)
- Multiple unit configuration
- Condenserless option
- Heat recovery capability up to 140°F (60°C)
- Capability to manifold and control up to eight (8) modules together







IPLV

as low as

SeismiCompliant* HVAC Equipment

SEISMICALLY	CERTIFIED PRODUCTS (WATER-COOLED)	OSP NUMBER
	AQUAEDGE® 19XR(V) TWO-STAGE WATER-COOLED CENTRIFUGAL CHILLERS	OSP-0026-10 [†]
	AQUAEDGE® 19XR(V) SINGLE-STAGE WATER-COOLED CENTRIFUGAL CHILLERS	OSP-0026-10
2	AQUAEDGE® 23XRV WATER-COOLED SCREW CHILLERS	OSP-0135-10
	AQUAFORCE® 30HX WATER-COOLED SCREW CHILLERS	OSP-0161-10
	AQUASNAP® 30MP WATER-COOLED SCROLL CHILLERS	OSP-0184-10 [†]

†Certain models only at this time









Water cooled chillers within the scope of the AHRI WCCL certification program are certified in accordance with the AHRI Water-Cooled Water-Chilling and Heat Pump Water-Heating Packages Certification Program, which is based on AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI). Certified units may be found in the AHRI Directory at www.ahridirectory.org. Condenserless versions of these units are not certified under the AHRI certification program. Capacities above 3,000 Tons (10,551 kW) are not certified under the AHRI certification program.

SEISMICOMPLIANT

*Meets IBC 2006, ASCE-7-05, CBC 2007 and OSHPD seismic requirements.

Benefits at a Glance

For Building Owners and Managers

- Reduces operating expenses
- Easy to maintain
- Quiet operation
- Reliable operation
- · Environmentally sound refrigerant

For Consulting Engineers

- ASHRAE 90.1 compliant
- HFC or HFC/HFO refrigerant
- High-efficiency optimization
- Ideal for replacement projects

For Contractors

- Easy to disassemble
- Ideal for replacement
- · Diagnostic controls
- Reliable performance
- Reduces installation expenses

