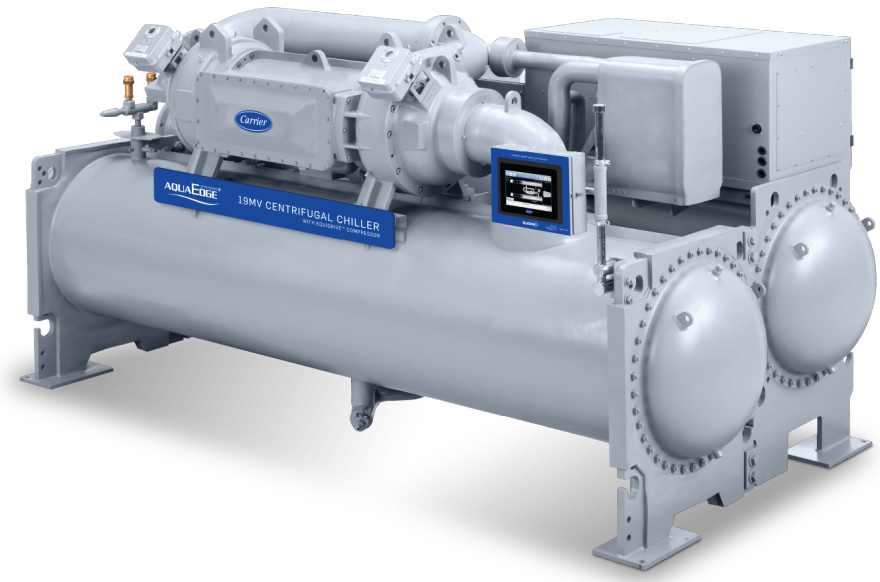
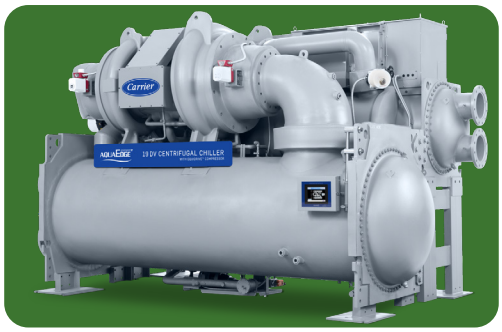
Carrier

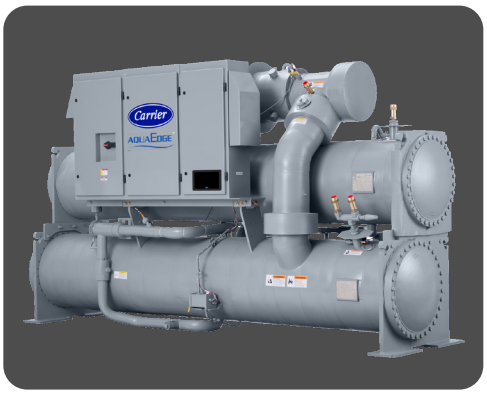




Aqua Series®
Water-Cooled Chillers and Heat Pumps

17 – 3,400 Tons (60 – 11,957 kW)

The Right Choice for Today and Tomorrow.



greenspeed AQUAEDGE

AQUAFORCE®

AQUASNAP®

Chillers that Deliver Efficiency, Flexibility and Sustainability.

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.

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, 19MV, 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.

These units boast integrated part-load values (IPLV) to 0.288 and full load kW/Tons to 0.505 while utilizing either R-513A, R-515B, R-32, PUREtec™ (R-1233zd(E)) or PUREtec™ (R-1234ze(E)). Aqua Series water- cooled chillers are ideal for replacement or new construction with small footprints and easy disassembly options.

The 19MV, 19DV and 23XRV deliver industry-leading IPLVs as low as 0.310, 0.288 and 0.299, respectively. Carrier water-cooled chillers pair excellent full load and IPLV performance to reduce demand (peak kW) and energy (Kwh) consumption.

The 19DV, utilizes ultra-low GWP PUREtec™ (R-1233zd(E)), an A1 refrigerant†. Carrier chillers are also manufactured in an award winning, LEED® certified plant.

Comprehensive Service Solutions to Fit Your Needs

With Carrier, you are not just getting the most innovative equipment in the industry, but a trusted partner delivering expertise, service and greater peace of mind throughout the entire lifecycle of your HVAC system. Our comprehensive portfolio of solutions range from predictive maintenance, flexible service agreements, repairs, upgrades, OEM spare parts, and rentals, as well as building and energy management systems. And with our BluEdge service agreements, all powered by digital connectivity through Abound™ HVAC Performance, you get continuous monitoring and actionable insights to ensure your equipment's peak performance and longevity for years to come.

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.

Heat Pumps††

Carrier water to water, non-reversing, heat pumps provide heated leaving condenser water for useful heating purposes. Heat pumps are controlled to maintain a leaving condenser hot water setpoint and are used when heating is the priority. A heat pump takes heat from a low grade heat source such as an internal building cooling load or from an externally source such as geothermal, aquifer or other wasted heat sources. The use of a heat pumps often reduces a building's carbon footprint through a concept called decarbonization and electrification, reducing the need for using fossil fuels as an energy heat source.

†According to the IPCC's Fourth Assessment Report (AR4) of 2007, PUREtec™ (R-1233zd(E)) has a 1.34 GWP100. GWP is a measure of a substance's climate warming impact compared to CO^2.

††Options available where applicable.

AquaEdge 19DV Two-Stage Chillers

- 350 — 1,150 Tons (1,231— 4,044 kW)
- PUREtec™ (R-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

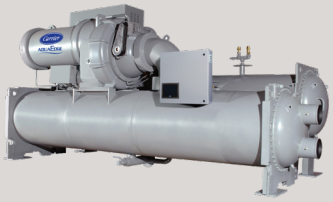
IPLV as low as 0.288

AquaEdge 19MV Two-Stage Chillers

- 150 — 700 Tons (527 — 2,461 kW)
- R-513A, R-515B refrigerant or PUREtec™ (R-1234ze(E))
- Back-to-Back EquiDrive compressor
- Full capacity at virtually no lift
- MORe = More Operating Range while maintaining operating efficiency at design conditions

AquaEdge 19XR(V) Single-Stage Chillers

- 300 — 550 Tons (1,055 — 1,934 kW)
- R-513A refrigerant
- Semi-hermetic motor
- ASME heat exchangers
- Factory installed VFD option



AquaEdge 19XR(V) Two-Stage Chillers

- 600 — 3,400 Tons (2,110 — 11,957 kW)
- R-513A and R-515B refrigerant
- Semi-hermetic motor
- ASME heat exchangers
- VFD option
- High lift and ice duty capability

AquaEdge 23XRV Chillers

- 175 - 550 Tons (615 - 1,934 kW)
- R-513A refrigerant
- Industry best part load performance
- Semi-hermetic motor
- IEEE-519 compliant VFD*
- Patented compressor design reduces bearing load
- Greenspeed® intelligence

IPLV as low as 0.299

AquaForce 30HX Chillers

- 75 — 265 Tons (264-932 kW)
- R-513A 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

AquaSnap 30MP Chillers/Heat Pumps

- 17 — 80 Tons (60 — 281 kW), manifold capability up to 640 Tons (2,250 kW)
- R-32 refrigerant
- Reduced installation cost
- Small footprint (fits through a standard doorway)
- Multiple unit configuration
- Condenserless option*
- Heat pump capability (30MPQ) - up to 140°F (60°C)*
- Capability to manifold and control up to eight (8) modules together

All water-cooled chillers are equipped with digital connectivity, enabled by our IoT platform Abound™ HVAC Performance. With a BluEdge service agreement, this allows for continuous monitoring and predictive insights.

* Select models

SeismiCompliant* HVAC Equipment

With Carrier's special seismic-compliant package, the Aqua Series water-cooled chillers meet or exceed the California Department of Health Care Access and Information (HCAI) standards.

	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†
	AQUAEDGE 23XRV Water-Cooled Screw Chillers	OSP-0406
	AQUAFORCE 30HX Water-Cooled Screw Chillers	OSP-0161-10
	AQUAEDGE 19DV Water-Cooled Centrifugal Chillers	OSP-0797

Carrier is committed to providing our planet and people a better future by offering the best refrigerant for each application.

†Certain models only at this time
* Select models

SEISMICOMPLIANT*

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

ASHRAE 90.1 COMPLIANT

ASME

AHRI CERTIFIED® www.ahridirectory.org
Water-Cooled Chillers
AHRI Standards 550/590 and 551/591

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.

Benefits at a Glance

FOR BUILDING OWNERS AND MANAGERS

- Reduces operating expenses
- Easy to maintain
- Quiet operation
- Reliable operation
- Environmentally sustainable refrigerant
- Digital connectivity

FOR CONSULTING ENGINEERS

- ASHRAE 90.1 compliant
- High-efficiency optimization
- Ideal for replacement projects

FOR CONTRACTORS

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

Carrier

carrier.com/commercial