



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, R-513A, R-515B, 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 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, 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. 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.

#### **SEISMIC COMPLIANT\***

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

## BluEdge® SERVICE PLATFORM AND PREVENTIVE MAINTENANCE:

The BluEdge service platform is Carrier's best-in-class service and aftermarket offering. It instills confidence in our customers, who know that Carrier is there to support them with unmatched expertise and superior service throughout the lifecycle of their HVAC equipment. Our BluEdge service platform is designed to meet your requirements and keep your equipment running efficiently.



#### **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.

#### **AQUAEDGE 19DV TWO-STAGE CHILLERS**

■ 350 to 1,150 Tons (1,231-4,044 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



**IPLV** as

low as 0.288

#### **AQUAEDGE 19MV TWO-STAGE CHILLERS**

- 300 to 700 Tons (1,055-2,461 kW)
- HFC-134a, R-513A or R515B refrigerant
- Back-to-Back EquiDrive compressor
- Full capacity at virtually no lift
- MORe = More Operating Range while maintaining operating efficiency at design



#### **AQUAEDGE 19XR(V) SINGLE-STAGE CHILLERS**

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



**IPLV** 

as low

#### **AQUAEDGE 19XR(V) TWO-STAGE CHILLERS**

- 600 to 3,400 Tons (2,110-11,957 kW)
- HFC-134a or R-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 or R-513A refrigerant.
- Industry best part load performance
- Semi-hermetic motor
- IEEE-519 compliant VFD
- Patented compressor design reduces bearing loads -Greenspeed®

intelligence



#### **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



# SeismiCompliant\* HVAC Equipment

#### **SEISMICALLY-CERTIFIED PRODUCTS (WATER-COOLED)**

	AQUAEDGE 19XR(V) Two-Stage Water-Cooled Centrifugal Chillers	OSP-0026-10 <sup>†</sup>
	AQUAEDGE 19XR(V) Single-Stage Water-Cooled Centrifugal Chillers	0SP-0026-10 <sup>†</sup>
0	AQUAEDGE 23XRV Water-Cooled Screw Chillers	0SP-0135-10
	AQUAFORCE 30HX Water-Cooled Screw Chillers	OSP-0161-10
	AQUASNAP 30MP Water-Cooled Scroll Chillers	OSP-0184-10 <sup>†</sup>

†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<sup>®</sup>

\*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 sustainable refrigerant

#### **FOR CONSULTING ENGINEERS**

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

#### **FOR CONTRACTORS**

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

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