



## Aqua Series® Air-Cooled Chillers



10 to 500 Tons





## Environmentally Balanced and Energy-Efficient Air-Cooled Chillers



Leave it to Carrier to design chillers in ways you'll notice at the initial purchase, through installation and for years afterward. Our Aqua Series chillers

install quickly and easily to save you time and money. And the savings will continue to mount with lower operating costs due to Aqua Series' superior full- and part-load performance. Available in 10- to 500-ton chillers, the Aqua Series chillers come in two lines:

**AquaSnap®** chillers with HFC Puron® refrigerant (R-410A) provide excellent part-load performance in a compact package, while meeting or exceeding ASHRAE 90.1 minimum energy efficiency requirements. Now available with optional Greenspeed® Intelligence, from 10 to 300 tons, delivering a quieter and much more efficient unit with IPLV up to 17.9.

**AquaForce®** chillers with HFC-134a provide full- and part-load performances in a single chassis exceeding ASHRAE 90.1 standards. The AquaForce chillers are available with variable speed technology (Greenspeed Intelligence) with IPLVs up to 22.

With environmentally balanced refrigerant, simple installation, superior efficiency and powerful controls, these units are ideal for both replacement and new construction projects.

### ENVIRONMENTAL LEADERSHIP

Carrier was the first manufacturer to introduce non-ozone-depleting refrigerant — a full six years ahead of the competition — paving the way for the future. Once again, Carrier leads the way, being the first to use environmentally balanced refrigerant in air-cooled chillers. All of the energy-efficient AquaSnap chillers, from 10 to 300 tons, come standard with Puron refrigerant and can be incorporated into Leadership in Energy and

Environmental Design (LEED®) Green Building Rating System projects. Furthermore all of the AquaForce chillers utilize HFC-134a.

### AFFORDABILITY/INSTALLABILITY

Aqua Series air-cooled chillers feature a compact, all-in-one package design. Aqua Series chillers are available with or without an integrated hydronic package up to 325-ton size. If you choose the optional built-in hydronics package, you get an entire chilled-water system with the pump, circuit setter, strainer, required piping and freeze protection to -20°F. For installation convenience, all pump motors offer standard VFD (variable frequency drive) compatibility and most hydronic packages are available with a factory-installed VFD. This prepackaged design costs less than buying and installing the components individually. The Aqua Series also saves on installed cost due to its rugged base frame. The frame is capable of point loading, which lowers installed cost by eliminating expensive field-erected base rails.

### EFFICIENCY

Along with cost efficiency in purchase and installation, Aqua Series chillers are also more affordable to operate. They are highly efficient, with full-load energy efficiency ratios (EER) up to 10.9 and integrated part-load value (IPLV) ratings as high as 22. The key to Aqua Series chillers' great operating performance is the use of highly efficient rotary scroll and screw compressors. These compressors use patented sealing techniques, allowing for high volumetric efficiency and low frictional losses. They are maintenance-free and protected by an auto-adaptive control that minimizes wear.

### QUIET

Aqua Series chillers make their noise in the marketplace, not the workplace. The AquaSnap chiller's low-sound AeroAcoustic® fan produces up to half the sound level of the propeller fan. Much of the noise reduction is in frequencies where noise is most annoying, which makes AquaSnap chillers ideal for sound-sensitive environments. In addition, Aqua Series chillers offer a low-sound option.



# SEISMICOMPLIANT

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



## AQUASNAP® 30RAP CHILLERS

- 10 to 150 Tons
- HFC Puron® refrigerant (R-410A)
- Reduced operating costs
- Quiet operation
- Reliable operation
- Plug-and-play hydronics
- Novation® microchannel heat exchanger and round tube plate fin (070-150) coils
- With optional Greenspeed® Intelligence (010-060)
- IPLV up to 17.1
- Condenser coil available in MCHX (std), AlCu, CuCu



## AQUASNAP® 30RB SCROLL CHILLERS

- 60 to 300 Tons
- HFC Puron® refrigerant (R-410A)
- Simple to specify
- ASHRAE 90.1 compliant
- Streamlined installation
- Reduced installation expenses
- Plug-and-play hydronics
- Heat Reclaim (desuperheater) option
- With optional Greenspeed® Intelligence
- IPLV up to 17.1
- Condenser coil available in MCHX (std), AlCu, CuCu
- Shell-in-tube evaporator



## AQUAFORCE® 30XV VARIABLE SPEED SCREW CHILLERS

- 140 to 500 Tons
- HFC-134a refrigerant
- Reliable performance / ease to start & operate
- Reduced footprint
- High efficiency with IPLV as high as 22
- Plug-and-play hydronics up to 325 tons
- Low leaving water temperature option down to 10F
- Innovative/unique free-cooling offer
- Condenser coil available in MCHX (std), AlCu, CuCu
- Variable speed compressors and condensers fans
- Fully air-cooled VFDs (no need for glycol cooling)

# Selection Guide

<b>30RAP (R-410A)</b>	011*	016*	018*	020*	025*	030*	035*	040*	045*	050*	055*
<b>Capacity (tons)</b>	10	14	16	19	23	28	34	39	43	47	52
<b>Length (in.)</b>	67	67	89	89	89	89	89	89	89	89	89
<b>Approx. Weight (lb.)</b>	762	800	1,125	1,133	1,242	1,283	2,163	2,185	2,238	2,263	2,369

<b>30RAP (R-410A) cont.</b>	060*	070	080	090	100	115	130	150			
<b>Capacity (tons)</b>	56	69	77	84	99	112	128	140			
<b>Length (in.)</b>	89	151	151	151	191	191	232	232			
<b>Approx. Weight (lb.)</b>	2,375	3,410	3,641	3,697	4,690	5,008	6,451	6,938			

<b>30RB (R-410A)</b>	060	070	080*	090*	100*	110*	120*	130*	150*	160*	170*
<b>Capacity (tons)</b>	57	67	76	86	93	106	118	127	140	153	164
<b>Length (in.)</b>	95	95	95	142	142	142	189	189	189	236	236
<b>Approx. Weight (lb.)</b>	3,783	3,978	4,267	5,449	5,663	6,027	7,119	7,402	8,517	9,475	9,799

<b>30RB (R-410A) cont.</b>	190*	210*	225*	250*	275*	300*	315*	330*	345*	360*	390*
<b>Capacity (tons)</b>	186	196	206	228	251	272	306	317	328	350	372
<b>Length (in.)</b>	283	283	283	330	377	424	472	472	472	519	566
<b>Approx. Weight (lb.)</b>	11,064	12,772	13,093	14,349	15,647	16,893	18,950	19,274	19,598	20,863	22,128

\*Available with Greenspeed® Intelligence (optional)

<b>30XV (R-134a)</b>	140			160			180			200			225		
<b>Tier</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>
<b>Capacity (tons)</b>	142	145	147	162	165	165	177	183	184	197	201	203	218	222	224
<b>Length (in.)</b>	206	206	253	206	253	300	206	253	300	253	300	347	253	300	347
<b>Approx. Weight (lb.)</b>	11110	11175	12058	11175	12245	13112	11362	12317	13184	12090	13157	13946	12902	13810	14677

<b>30XV (R-134a)</b>	250			275			300			325			350		
<b>Tier</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>
<b>Capacity (tons)</b>	259	263	264	275	278	281	290	292	295	315	321	324	347	351	352
<b>Length (in.)</b>	300	347	394	300	347	394	347	394	441	394	441	488	406	453	500
<b>Approx. Weight (lb.)</b>	15117	16170	17217	15467	16207	17074	16207	17118	17959	17118	18008	18937	20158	21779	22557

<b>30XV (R-134a)</b>	400			450			500		
<b>Tier</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>	<b>Std+</b>	<b>Mid</b>	<b>High</b>	<b>Std+</b>	<b>Mid</b>	
<b>Capacity (tons)</b>	400	404	408	453	455	458	493	502	
<b>Length (in.)</b>	453	500	547	500	547	594	547	594	
<b>Approx. Weight (lb.)</b>	23213	24156	24935	24156	25660	26525	25660	26600	

## Benefits at a Glance

### For Building Owners and Managers

- Reduced operating costs
- Quiet operation
- Reliable operation
- Environmentally balanced refrigerant

### For Consulting Engineers

- Simple to select
- ASHRAE 90.1 compliant
- High efficiency
- Reduced energy consumption
- HFC refrigerants

### For Contractors

- Streamlined installation
- Reduced installation expenses
- Reliable performance
- Easy to start-up and operate
- Plug-and-play hydronics

