SIMPURITY \ OR \ INTELLIGENCE ?

AQUASNAP® WITH GREENSPEED® INTELLIGENCE, BECAUSE YOU SHOULD NOT HAVE TO CHOOSE.

Air-cooled scroll chillers
160 kW - 520 kW
30RBM & 30RBP
Carrier solutions based on experience and expertise

Carrier Heritage
Since Willis Carrier developed the world’s first modern air conditioning system in 1902, Carrier teams have been designing solutions tailored to each customer’s requirements. Over time, Carrier has been recognized as a pioneer in the design and manufacture of heating, ventilation and air conditioning (HVAC) solutions with sustainable performance, and equally important, for its commitment to first class service.

Carrier Commitment

- Quality
Carrier quality and reliability are incorporated and guaranteed in all products and systems. Products undergo extensive tests before they are shipped to the customer and are also certified by internal organizations to ensure the highest levels of safety and quality.

- Sustainability
Carrier continually works to improve the environmental performance of its products and services, operations and its culture to help lead the way to environmental sustainability. Sustainability is one of the issues that affects the real-estate value of modern buildings. A high-efficiency air conditioning system with a low carbon footprint is a must to support green building design.

- Performance
Carrier strives for continuous growth to reinforce its leadership position, continuously improving the productivity of its assets and resources.

- Service Excellence
The Carrier Service delivery model maintains a reputation for high customer satisfaction and delivers service excellence with strong communication channels, the top technicians in the industry, continuous improvement of contracts and a highly experienced management team.

- Innovation
Carrier is a company of ideas, committed to research and development, whose founder still inspires the company to reach the next innovative, powerful and marketable idea. Carrier AdvanceTEC, a global group of Experts in Efficiency and Environment, supports customers around the world in developing strategic, energy-efficient and custom-engineered building solutions.

- Expertise
Carrier delivers global solutions across the broadest range of air conditioning, ventilation and heating applications. With a proven track record of leadership and industry expertise, Carrier provides a portfolio of market-leading products and services.

SIMPPLICITY
The simplicity of AquaSnap, tried and trusted

- Experience
With more than 60,000 units installed since 1998, AquaSnap is the reference standard in “plug & play” air conditioning solutions. Compact and simple to install, the new AquaSnap with Greenspeed intelligence combines trusted reliability with even more innovation.

- Easy installation
AquaSnap integrates an hydraulic module with pressure transducers for digital water flow rate display on the user interface and pump protection against low hydraulic pressures. The variable-speed pump allows easy and fast installation start-up thanks to the electronic setting of the nominal water flow.

- Adaptability
The AquaSnap can operate in all climates from -20°C to +52°C. Thanks to special coil coatings and reinforced electrical protections, the AquaSnap can withstand operation in corrosive and dusty environments. To match specific industrial or commercial application requirements, the unit can be equipped with multiple options.

REFERENCE IN «PLUG & PLAY» AIR CONDITIONING SOLUTIONS

UP TO 15% MORE EFFICIENCY WITH THE SAME DIMENSIONS AS PREVIOUS GENERATION

ONE PRODUCT FOR MANY APPLICATIONS

INTELLIGENCE
Greenspeed intelligence: the smart innovation

- Smart efficiency
The new generation of AquaSnap chillers delivers on the energy savings and reduced carbon footprint required by the latest European regulations. AquaSnap with Greenspeed intelligence offers Class A or B energy efficiency ratings and European Seasonal Energy Efficiency Ratio (ESEER) of up to 4.36, making it the best value air conditioning solution in commercial and industrial applications.

- Acoustic comfort
Thanks to the variable-speed fans, AquaSnap with Greenspeed intelligence offers smooth fan speed variation during partial load operation. For noise sensitive environments during night and day, the AquaSnap noise level can be automatically factory-set or tuned on-site.

- Advanced control
An advanced control algorithm calculates the energy efficiency and adjusts it in real-time to meet real application needs, and thus reduce significantly the pumping energy use during night and day.

Acoustic comfort

LIFETIME ENERGY SAVINGS

- Variable-speed pump

- Previous AquaSnap

- New AquaSnap

- New AquaSnap with Greenspeed intelligence

10-year energy savings calculations comparing a 650kW AquaSnap unit U2.0.ELSEE2 with the previous generation to a new AquaSnap unit U2.0.ELSEE2, a new AquaSnap Greenspeed unit U2.0.ESEER2 with variable-speed pump at a office building in an average European climate. 10000 running hours and 500 stand-by hours per year. This information is intended as an example for comparison purposes only.

Experience
Easy installation
Adaptability
Climate
Simplicity
Sustainability
Performance
Service Excellence
Innovation
Expertise
Quality
Reference in «plug & play» air conditioning solutions
15% more efficiency with the same dimensions as previous generation
One product for many applications
Intelligence
Greenspeed intelligence: the smart innovation
Smart efficiency
Acoustic comfort
Advanced control
Carrier with Greenspeed intelligence
AquaSnap scroll chillers

**30RBM**

**NOVATION® MICROCHANNEL**
- Up to 50% refrigerant charge reduction vs. traditional Cu/Al coils
- Better thermal performance, better efficiency and lower air pressure drop vs. Cu/Al coils
- Enviro-Shield® and Super Enviro-Shield® coatings, as options, for mild and severe corrosive environments

**PRO-DIALOG+**

**TOUCH PILOT® CONTROL** (Option)
- 5” user-friendly touch screen
- All main parameters displayed on one screen
- Direct access to the unit’s technical drawings and main service documents
- Easy remote monitoring via the internet
- Easy and secured access to unit parameters

**FIXED-SPEED FLYING BIRD® FAN**

**HIGH EFFICIENCY BRAZED PLATE HEAT EXCHANGER**

**SCROLL COMPRESSORS**

**REDUCED REFRIGERANT CHARGE**

Ecodesign is the European Directive that sets mandatory requirements for Energy-related Products (ErP) to improve their energy efficiency. Carrier supports initiatives to reduce the environmental impact of its products. AquaSnap with Greenspeed intelligence ranges are designed to anticipate and exceed future regulation requirements.

1) **Cooling energy savings**

ESEER up to +15% vs previous AquaSnap

2) **Pumping energy savings**

Pumping costs can be reduced up to 2/3

-14% Electronic nominal water flow setting

-80% Automatic speed reduction

-50% Fixed-speed pump

-60% Chilled water pump

Source: Carrier estimation based on pump affinity law. This information is intended as an example for comparison purposes only.

* Testing by Carrier Laboratory
Specific options for specific needs

- **MEDIUM- OR LOW-TEMPERATURE BRINE SOLUTION**
  Low temperature chilled water production down to -6°C (medium) or to -12°C (low) covers specific applications such as ice storage and industrial process cooling.

- **HYDRONIC FREE-COOLING**
  This option is particularly adapted for data centers and industrial process cooling applications in cold climate regions.
  It results in significant energy savings by reducing the number of compressor running hours during cold season.

- **DX FREE COOLING SYSTEM ON ONE OR TWO CIRCUITS**
  For applications with moderate cooling demand throughout the entire year including the cold season, units can be equipped with patented Carrier free-cooling system with cooling micro-pump on one or on the two refrigerant circuits. Operation without glycol, no extra free-cooling coil. This results in significant energy savings.

- **PARTIAL OR TOTAL HEAT RECOVERY**
  To produce free hot water and chilled water simultaneously, units can be equipped with one desuperheater on each refrigerant circuit (partial heat recovery) or with additional heat exchanger in parallel with the condenser coil (total heat recovery).
### 30RBM & 30RBP

<table>
<thead>
<tr>
<th>NOMINAL COOLING CAPACITY* (kW)</th>
<th>160</th>
<th>180</th>
<th>200</th>
<th>220</th>
<th>260</th>
<th>300</th>
<th>330</th>
<th>360</th>
<th>400</th>
<th>430</th>
<th>470</th>
<th>520</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>30RBM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESEER* (kW/kW)</td>
<td>4.00</td>
<td>4.07</td>
<td>4.01</td>
<td>4.00</td>
<td>4.00</td>
<td>4.07</td>
<td>4.08</td>
<td>4.10</td>
<td>4.06</td>
<td>4.07</td>
<td>4.04</td>
<td>4.03</td>
</tr>
<tr>
<td>EER* (kW/kW)</td>
<td>3.04</td>
<td>3.12</td>
<td>2.98</td>
<td>2.97</td>
<td>2.90</td>
<td>2.97</td>
<td>2.92</td>
<td>2.95</td>
<td>2.90</td>
<td>2.94</td>
<td>2.90</td>
<td>2.90</td>
</tr>
<tr>
<td><strong>30RBP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESEER* (kW/kW)</td>
<td>4.18</td>
<td>4.21</td>
<td>4.14</td>
<td>4.18</td>
<td>4.15</td>
<td>4.37</td>
<td>4.37</td>
<td>4.26</td>
<td>4.36</td>
<td>4.44</td>
<td>4.30</td>
<td></td>
</tr>
<tr>
<td>EER* (kW/kW)</td>
<td>3.04</td>
<td>3.12</td>
<td>2.98</td>
<td>2.97</td>
<td>2.90</td>
<td>2.97</td>
<td>2.92</td>
<td>2.95</td>
<td>2.90</td>
<td>2.94</td>
<td>2.90</td>
<td>2.90</td>
</tr>
</tbody>
</table>

### SOUND POWER LEVEL*

<table>
<thead>
<tr>
<th>STANDAR D UNIT (dB(A))</th>
<th>91</th>
<th>92</th>
<th>92</th>
<th>92</th>
<th>92</th>
<th>93</th>
<th>93</th>
<th>93</th>
<th>94</th>
<th>94</th>
<th>94</th>
<th>94</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW NOISE UNIT (dB(A))</td>
<td>89</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>91</td>
<td>91</td>
<td>92</td>
<td>92</td>
<td>93</td>
<td>93</td>
<td>93</td>
<td>93</td>
</tr>
<tr>
<td>VERY LOW NOISE UNIT (dB(A))</td>
<td>85</td>
<td>85</td>
<td>85</td>
<td>85</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>87</td>
<td>87</td>
<td>88</td>
<td>88</td>
</tr>
</tbody>
</table>

### PHYSICAL DATA

<table>
<thead>
<tr>
<th>COMPRESSORS NO. CIRCUIT A / NO. CIRCUIT B</th>
<th>1/2</th>
<th>1/2</th>
<th>1/2</th>
<th>2/2</th>
<th>2/2</th>
<th>2/3</th>
<th>2/3</th>
<th>3/3</th>
<th>3/4</th>
<th>3/4</th>
<th>4/4</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINIMUM CAPACITY (%)</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>17%</td>
<td>17%</td>
<td>13%</td>
</tr>
<tr>
<td>LENGTH (mm)</td>
<td>2410</td>
<td></td>
<td></td>
<td>3604</td>
<td></td>
<td></td>
<td></td>
<td>4797</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WIDTH (mm)</td>
<td>2253</td>
<td></td>
<td></td>
<td>2253</td>
<td></td>
<td></td>
<td></td>
<td>2297</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEIGHT (mm)</td>
<td>2297</td>
<td></td>
<td></td>
<td>2297</td>
<td></td>
<td></td>
<td></td>
<td>2297</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Eurovent-certified performances in accordance with standard EN14511-3:2013

Cooling mode conditions: evaporator water entering/leaving temperature 12°C/7°C, outside air temperature 35°C, evaporator fouling factor 0 m².K/KW

Carrier participates in the ECP program for Liquid Chilling Packages and Hydronic Heat Pumps. Check ongoing validity of certificate on www.eurovent-certification.com

### OPTIONS

<table>
<thead>
<tr>
<th>OPTIONS</th>
<th>30RBM</th>
<th>30RBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP SINGLE-PUMP HYDRONIC MODULE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HP DUAL-PUMP HYDRONIC MODULE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP SINGLE-PUMP HYDRONIC MODULE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP DUAL-PUMP HYDRONIC MODULE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HP VARIABLE-SPEED SINGLE-PUMP HYDRONIC MOD.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HP VARIABLE-SPEED DUAL-PUMP HYDRONIC MOD.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WELDED EVAPORATOR WATER CONNECTION KIT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPANSION TANK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOW NOISE LEVEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VERY LOW NOISE LEVEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARTIAL HEAT RECOVERY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL HEAT RECOVERY**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DX FREE COOLING SYSTEM ON ONE CIRCUIT*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DX FREE COOLING SYSTEM ON TWO CIRCUITS*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HYDRONIC FREE COOLING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEDIUM-TEMPERATURE BRINE SOLUTION*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOW-TEMPERATURE BRINE SOLUTION*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNIT EQUIPPED FOR AIR DISCHARGE DUCTING*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGH AMBIENT TEMPERATURE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WINTER OPERATION DOWN TO -20°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WINTER OPERATION DOWN TO -10°C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Options available during 2015. Contact your Carrier representative for further information.

www.carrier.com