



AQUASNAP™

WATER-COOLED
LIQUID CHILLER

30RW



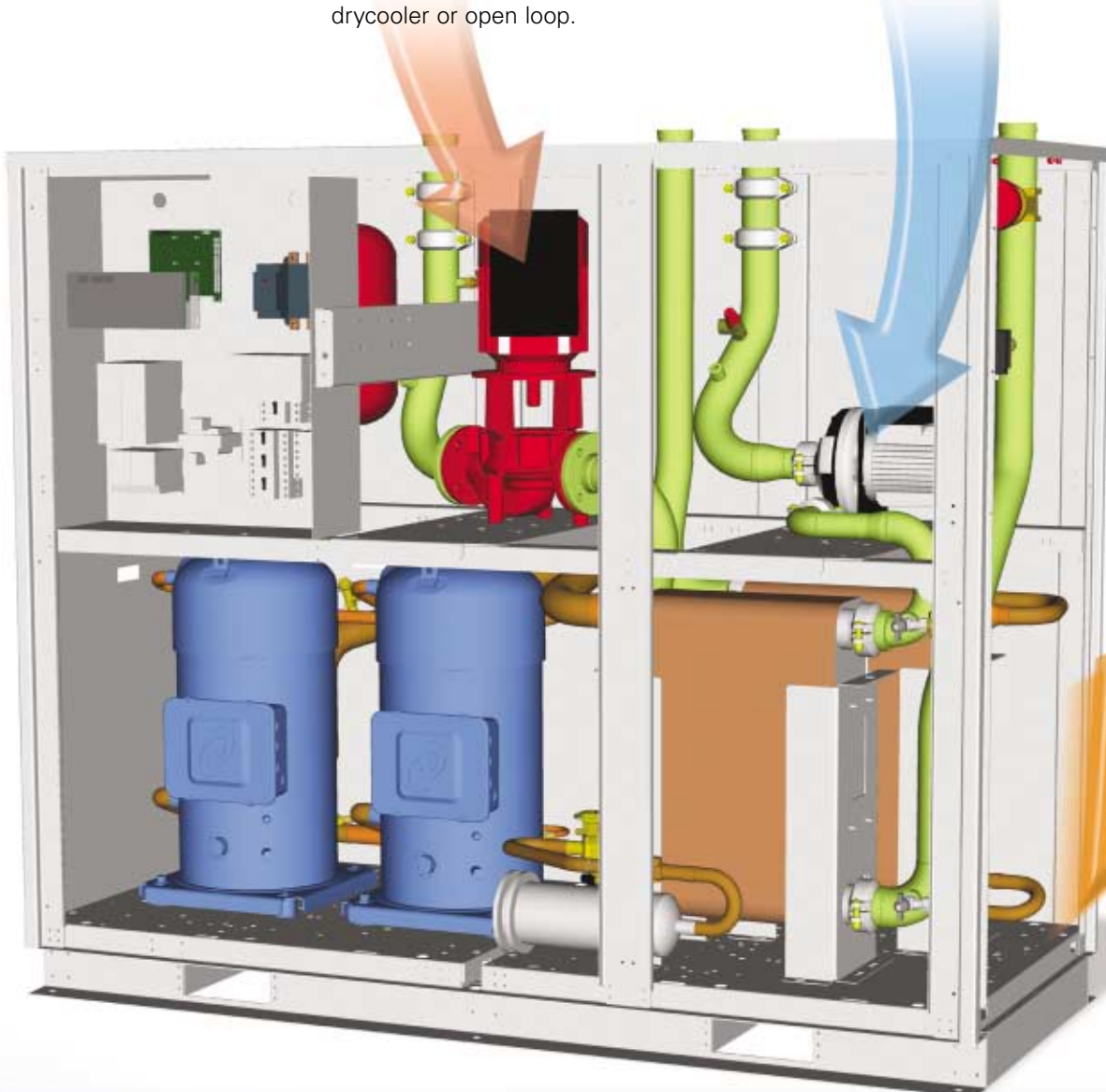
**BOLT DOWN,
PLUG IN ... READY!**

SO MUCH EASIER, AS EVERYTHING IS BUILT-IN



The intelligent design of the Aquasnap water-cooled liquid chiller includes all hydronic and control components to offer unrivalled installation simplicity: evaporator water pump, condenser water pump, expansion tanks, filters, safety accessories and even the drycooler fan control ... everything is incorporated in the chiller. The Aquasnap is easily connected to the system, whether a building or an industrial process and to the heat rejection system: drycooler or open loop.

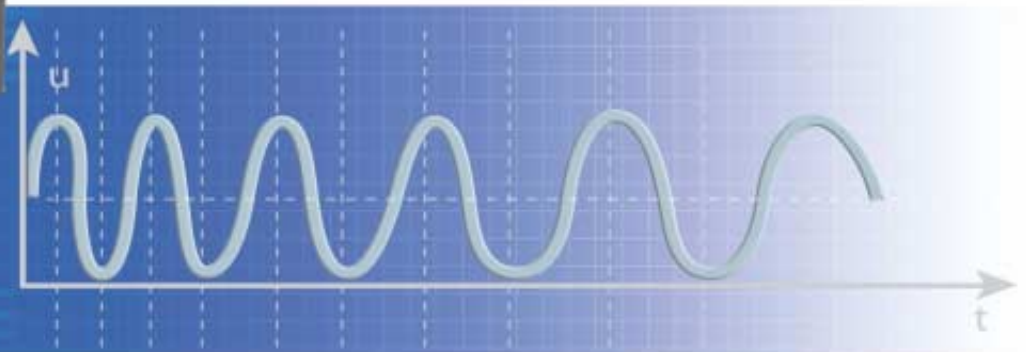
In addition the Aquasnap offers genuine technological innovation. In fact, the variable-speed condenser water pump permanently controls the water flow rate in order to control the condensing pressure. The chiller operates down to -15°C outside air temperature, optimising power consumption. In addition, the installation of a three-way valve in the condenser water circuit becomes unnecessary. One thing less to worry about, and more savings.



ECONOMIES THAT YOU

A TECHNOLOGICAL INNOVATION WITHOUT PRECEDENT

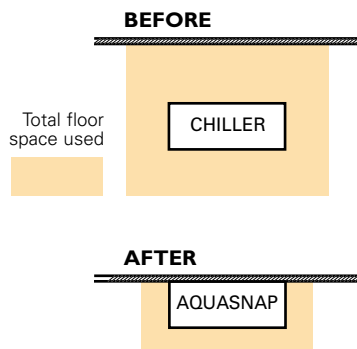
With variable speed you enter a new world of energy savings. In fact, the variable-speed condenser water pump of the Aquasnap automatically controls the cooling water flow to optimise condensing pressure. No matter what the outside temperature, the condensing pressure is automatically adjusted to its lowest value to ensure maximum opening of the expansion device.



Result!

The compressor load is reduced to the minimum, resulting in reduced energy consumption. Another advantage. Because the three-way valve in the cooling water circuit is no longer needed, system pressure drops are lower. The condenser water pump has a lower head, hence its energy consumption is reduced. Moreover, due to variable-frequency drive technology, water pump power consumption is considerably reduced at part load or at moderate outside temperatures with reduced water flow rate.

SIGNIFICANT SPACE SAVINGS



60% floor space saved!

This is now possible.

The reason is simple ... everything is built-in and encased by panels, and the space that would be required to install water pumps, valves and hydronic accessories is no longer needed!

Therefore you no longer need a plant room.

If local regulations permit, the Aquasnap can be installed in areas that are open to the public ... car parks, basements etc.

A saving in space and money.



CANNOT IGNORE

PRO-DIALOG, A POWERFUL CONTROL SYSTEM

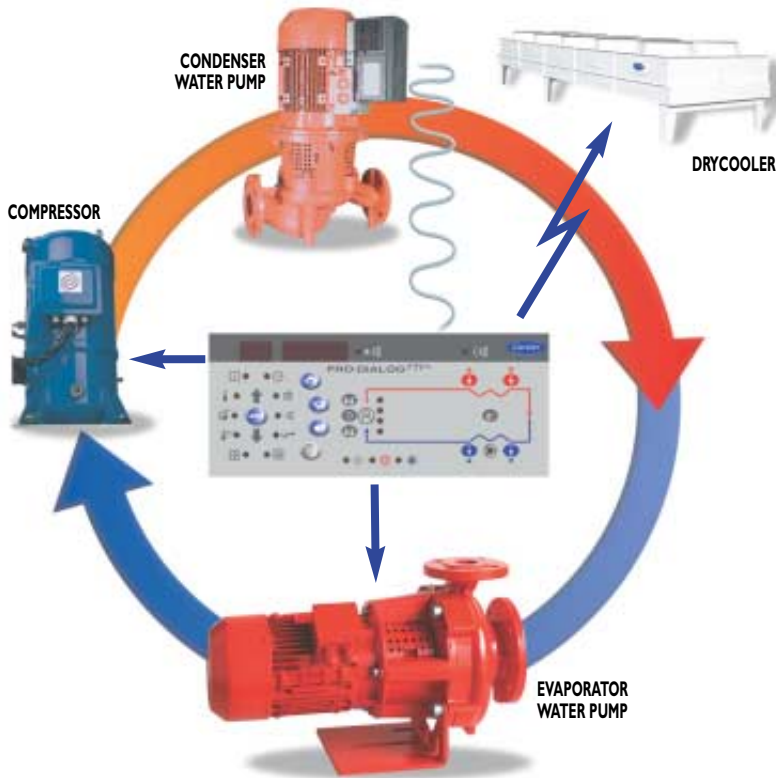
A true small genius!

The real brain of the system, the digital Pro-Dialog control can really do everything: it analyses operating parameters, optimises the required actions and even anticipates critical situations.

First phase! Pro-Dialog checks all system information in real time: compressor suction and discharge pressures, number of compressor start-ups, entering and leaving chilled water temperatures, entering cooling water temperatures, etc.

Following this first phase, auto-adaptive control algorithms anticipate the required actions and control all water production system components: compressors, evaporator water pump, condenser water pump speed and even the drycooler fans in order to optimise the condensing pressure.

Result! Flexible operation in any climate conditions, reduced energy consumption – all abnormal situations that are dangerous for the operation of the chiller are avoided. Perfect intelligence.



ULTRA-SIMPLE CONTROLS

The Pro-Dialog operator interface is a model of user-friendliness.

LEDs and numerical displays permit instant verification of the operating parameters. A simple touch of a button on the Aquasnap synoptic diagram is enough to immediately display temperatures, pressures, set point, operating time as well as the number of compressor start-ups.

Moreover, 10 access menus, one of which is specially provided to track the fault history, allow accurate control as well as precise diagnostics of the Aquasnap.

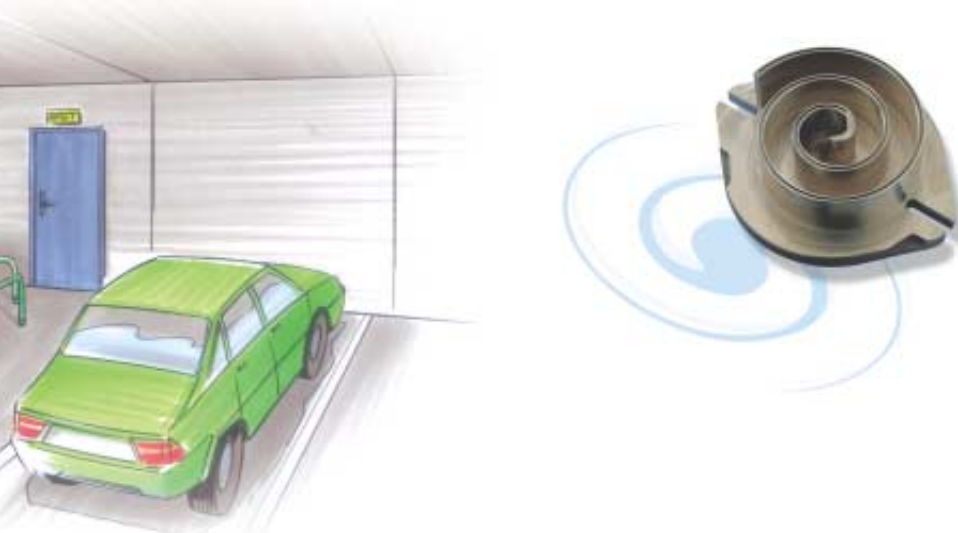
AN ULTRA-QUIET COMPRESSOR

Remarkable silence.

Aquasnap is equipped with rotary scroll compressors, minimising vibrations and nuisance noise. In fact, scroll compression uses only three moving parts.

The process is gentle, without pulsation. Moreover, the compressor is integrated into the Aquasnap casing. It is invisible.

Quiet, durable, reliable, the ultimate in peace-of-mind.



INSTALLED AND TESTED ... FOR INCREASED SIMPLICITY AND RELIABILITY

The Carrier drycoolers were specially developed for the Aquasnap and are supplied complete with a control box. All electrical and control components for the fans are installed at the factory, a simple communications bus links the liquid chiller to the drycooler. Goodbye to complicated electrical wiring, goodbye to complex controls ... everything has been considered, conceived, installed and tested in the factory for quick operation without nasty surprises. Guaranteed optimal operation.



AN AIR-COOLED SPLIT SYSTEM, THE OTHER SOLUTION

The Aquasnap is also available as a condenserless version, offering easy installation as the evaporator hydronic module and the fan control are built in. The remote air-cooled Carrier condenser is controlled by the chiller via a simple communications bus. Split system operation is always optimised and problem-free. An ideal solution for commercial buildings with tight budgets.

BOLT DOWN, PLUG IN - READY

Reduction of the on-site complexity, control of the technical and financial risks of the installation, time savings, simplified maintenance, customer satisfaction ... how can you achieve all these objectives? Simple. By choosing Aquasnap and its matching Carrier drycooler, you have guaranteed simplicity. Aquasnap is a complete system that makes your life easier. All components are integrated, and designed to operate together. Each element is fully mounted and tested in the factory before delivery. This way you save time during installation and you can be sure of the perfect result.





Carrier actively participates in the Eurovent certification programmes. Eurovent is an independent organisation that tests products and verifies the conformance between test results and data published by the manufacturer. Eurovent certification is an important guarantee for consultants and installers. They can be sure that a product with Eurovent certification will operate in conformance with the specifications and satisfy customer requirements. The Aquasnap chillers and heat pumps come with Eurovent certification.

TECHNICAL DATA 30RW

		020	025	030	040	045	060	070	080	090	110	120	135	150	160	185	210	245	275	300	
Cooling capacity	kW	20	26	30	40	45	56	70	80	91	109	124	140	154	159	182	218	249	286	312	
Refrigerant		R407C																			
Circuit		1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
Compressor: type/quantity		Scroll/1					Scroll/2					Scroll/4									
Evaporator		Stainless steel welded plates																			
Evaporator water pump		Monocell centrifugal																			
Evaporator water pump pressure	kPa	132	145	135	141	141	183	173	161	146	174	156	136	116	202	186	195	170	147	120	
Condenser		Stainless steel welded plates																			
Condenser water pump		Variable speed, monocell, centrifugal																			
Condenser water pump pressure	kPa	180	200	185	196	199	190	171	151	124	198	186	177	167	167	140	192	167	151	125	
Length	mm	1204	1204	1204	1204	1204	2004	2004	2004	2004	2004	2004	2004	2004	2952	2952	2952	2952	2952	2952	
Width	mm	650	650	650	650	650	850	850	850	850	850	850	850	850	850	850	850	850	850	850	
Height	mm	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1950	1950	1950	1950	1950	1950	
Operating weight	kg	377	396	399	432	452	717	748	789	815	959	1032	1052	1072	1404	1469	1697	1811	1897	1897	

* Standardised Eurovent conditions: Evaporator: 12/7°C, Condenser 30/35°C

OPTIONS AND ACCESSORIES

- Condenserless unit (30RWA)
- Heat pump operation
- Low leaving water temperatures down to -10°C (30RW)
- Hydronic evaporator and condenser module with dual water pump
- Unit without hydronic module
- Ultra low noise unit
- Electronic compressor starter (30RW020-150)
- Communication and time scheduling "CCN Clock Board"
- Aquasmart system communication board

AQUASNAP™ THE ALL-IN-ONE RANGE



30RA/30RH - COOLING ONLY/HEAT PUMPS
17-250 kW



30RY/30RYH
DUCTABLE COOLING ONLY/HEAT PUMPS
17-80 kW



30RW - WATER-COOLED UNITS
20-300 kW



Quality Management System Approval

Order No.: 18176-20-02/2002
Supersedes order No.: New
Manufacturer reserves the right to change
any product specifications without notice



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