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 dry cooler 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: dry cooler 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 dry cooler 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 dry coolers 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 dry cooler. 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

An ideal solution for commercia 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 dry cooler, 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.

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	20.2	25.9	29.9	39.7	45.3	56	70	80	91	108	123	139	149	162	183	216	247	284	310
Refrigerant		-								– R4	07C —									->
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——	->	-			– Scro	oll/2 -			->	-		- Scro	II/4 —		>
Evaporator	Welded plate heat exchangers										\rightarrow									
Evaporator water pump		Single centrifugal pump									-									
Evaporator water pump pressure*	kPa	132	145	135	142	143	185	177	165	152	176	159	139	128	205	192	199	176	155	129
Condenser		-					— We	elded d	lirect-e	xpansi	on plat	e heat	exchan	iger —						->
Condenser water pump		✓ Single centrifugal pump - variable speed									->									
Condenser water pump pressure*	kPa	181	201	186	198	202	194	178	159	135	202	193	184	180	176	154	200	178	165	143
Length	mm	1204	1204	1204	1204	1204	2004	2004	2004	2004	2004	2004	2004	2004	2950	2950	2950	2950	2950	2950
Width	mm	695	695	695	695	695	895	895	895	895	895	895	895	895	922	922	922	922	922	922
Height	mm	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1993	1993	1993	1993	1993	1993
Operating weight (with hydronic module)	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

TECHNICAL DATA 09 DRY COOLER

STANDARD		GF 10-1	GF 11-1	GF 12-2	GF 16-3	GF 16-3	GF 22-2	GF 26-3	GF 34-3	GF 44-4	GF 44-4	GF 45-5	GF 46-5	GF 47-6	GF 48-6	GE-CA 50-3	GE-CA 60-3	GE-CA 68-4	GE-CA 78-4	GE-CA 82-5
Sound pressure at 10 m	dB(A)	53	58	55	57	57	61	62	62	58	63	64	64	65	65	63	63	64	64	64
Number of fans		1	1	2	3	3	2	3	3	4	4	5	5	6	6	3	3	4	4	5
Length	mm	1125	1125	1575	2250	2250	2025	2925	2925	3825	3825	4725	4725	5625	5625	4160	4160	5280	5280	6400
Width	mm	1095	1095	895	895	895	1095	1095	1095	1095	1095	1095	1095	1095	1095	1935	1935	1935	1935	1935
Height	mm	1000	1000	900	900	900	1000	1000	1000	1000	1000	1100	1100	1100	1100	1700	1700	1700	1700	1700

	GF 11-1	GF 12-2	GF 18-2	GF 22-2	GF 34-3	GF 36-4	GE-CA 34-2	GE-CA 34-2	GE-CA 38-2	GE-CA 50-3	GE-CA 50-3	GE-CA 60-3	GE-CA 68-4	GE-CA 78-4	GE-CA 78-4	GE-CA 82-5	GE-CA 98-5	GE-CA 116-6	GE-CA 136-8
dB(A)	46	49	40	49	41	42	45	48	48	46	49	49	47	47	50	51	51	52	49
	1	2	2	2	3	4	2	2	2	3	3	3	4	4	4	5	5	6	8
mm	1125	1575	2025	2025	2925	3825	3040	3040	3040	4160	4160	4160	5280	5280	5280	6400	6400	5750	7400
mm	1095	895	1095	1095	1095	1095	1935	1935	1935	1935	1935	1935	1935	1935	1935	1935	1935	2570	2570
mm	1000	900	1000	1000	1000	1000	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
	dB(A) mm mm mm	GF 11-1 dB(A) 46 nm 1125 mm 1095 mm 1000	BF BF dB(A) 46 49 1 2 mm 125 1575 mm 1095 895 mm 1000 900	RF RF RF dB(A) 46 40 1 2 2 mm 125 1575 2025 mm 1095 895 1095 mm 1000 800 1005	here here <td>GF 11. GF 22. GF 23. GF 24. <thgf< thc=""></thgf<>24. <thgf< th=""> <thgf< <="" td="" thc=""><td>GF 11-0 GF 12-0 GF 18-2 GF 22-0 GF 23-0 GF 23-0 dB(A) 46 49 40 49 41 42 dB(A) 10 2 2 40 41 42 m 12 2 2 2 3 4 mm 125 1575 2025 2025 2925 3252 mm 1095 895 1095 1095 1095 1095 mm 1000 900 1000 1000 1000 1000</td><td>GF GF SF SF<</td><td>GF GF SF GF SF GF SF SF<</td><td>GF 11-0 GF 22 GF 25-0 <thgf< th=""> <thgf< th=""> GF 25-0</thgf<></thgf<></td><td>GF GF GF<</td><td>GF GF GF<</td><td>GF GF GF<</td><td>GF GF GF<</td><td>GF GF GF<</td><td>F1-1GF</td><td>F1GFG</td><td>GF GF GF<</td><td>GF GF GF<</td></thgf<></thgf<></td>	GF 11. GF 22. GF 23. GF 24. GF 24. <thgf< thc=""></thgf<> 24. <thgf< th=""> <thgf< <="" td="" thc=""><td>GF 11-0 GF 12-0 GF 18-2 GF 22-0 GF 23-0 GF 23-0 dB(A) 46 49 40 49 41 42 dB(A) 10 2 2 40 41 42 m 12 2 2 2 3 4 mm 125 1575 2025 2025 2925 3252 mm 1095 895 1095 1095 1095 1095 mm 1000 900 1000 1000 1000 1000</td><td>GF GF SF SF<</td><td>GF GF SF GF SF GF SF SF<</td><td>GF 11-0 GF 22 GF 25-0 <thgf< th=""> <thgf< th=""> GF 25-0</thgf<></thgf<></td><td>GF GF GF<</td><td>GF GF GF<</td><td>GF GF GF<</td><td>GF GF GF<</td><td>GF GF GF<</td><td>F1-1GF</td><td>F1GFG</td><td>GF GF GF<</td><td>GF GF GF<</td></thgf<></thgf<>	GF 11-0 GF 12-0 GF 18-2 GF 22-0 GF 23-0 GF 23-0 dB(A) 46 49 40 49 41 42 dB(A) 10 2 2 40 41 42 m 12 2 2 2 3 4 mm 125 1575 2025 2025 2925 3252 mm 1095 895 1095 1095 1095 1095 mm 1000 900 1000 1000 1000 1000	GF GF SF SF<	GF GF SF GF SF GF SF SF<	GF 11-0 GF 22 GF 25-0 GF 25-0 <thgf< th=""> <thgf< th=""> GF 25-0</thgf<></thgf<>	GF GF<	GF GF<	GF GF<	GF GF<	GF GF<	F1-1GF	F1GFG	GF GF<	GF GF<

Selections based on: Chilled water 12/6 °C - Cooling water 40/45 °C (15% EG) - Ambient dry bulb 30 °C

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UKAS

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OPTIONS AND ACCESSORIES

OPTIONS AND ACCESSORIES	AQUASNAP [™]
Condenserless unit 30RWA (operation with remote air-cooled condenser)	THE ALL-IN-ONE RANGE
Heat pump operation (hydronic circuits reversed)	
Low leaving water temperatures down to -10° C (30RW)	
Hydronic evaporator and condenser module with dual water pump (30RWA 060-300)	Z - M
Hydronic evaporator module with dual water pump (30RWA 060-300)	
Unit without hydronic condenser module (30RW)	30RA/30RH - COOLING ONLY/HEAT PUMPS
Unit without hydronic module	17-250 kW
Electronic compressor starter	The second se
Communication and time scheduling " CCN Clock Board"	
Aquasmart system communication board	
BMS communication interface	30RY/30RYH

DUCTABLE COOLING ONLY/HEAT PUMPS 17-80 kW



Dixit JM - RCS Lyon B 353 000 870



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Quality Management System Approva

Order No.: 18176-20-03/2004 Supersedes order No.: 18176-20-02/2002 Manufacturer reserves the right to change any product specifications without notice



A member of the United Technologies Corporation family

BOLT DOWN, PLUG IN ... READY!





$\mathbf{AQUASNAP}^{{}^{\scriptscriptstyle{\mathrm{M}}}}$

WATER-COOLED LIQUID CHILLER