

AIR-COOLED LIQUID CHILLERS WITH INTEGRATED HYDRONIC MODULE



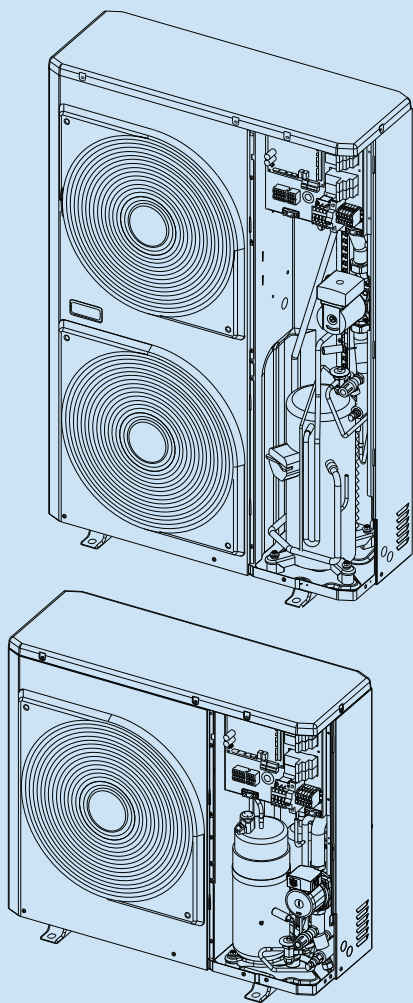
Air conditioning
30RB

AQUASNAP®

Accessories

- Aquasnap Junior remote controller


Hydronic module



Features

- Three sizes with nominal cooling capacities from 8 to 14 kW.
- Aquasnap liquid chillers, featuring the latest technological innovations: incorporating scroll or rotary compressors, low-noise fans and operating on the ozone-friendly refrigerant R-410A.
- Units have Eurovent energy efficiency class A (size 008) or B (sizes 012 and 015).
- Units are available with or without integrated hydronic module depending on the application. The integrated hydronic module reduces installation time and includes screen filter, water pump, expansion tank, safety valve and pressure gauge.
- Auto-adaptive control algorithm prevents excessive compressor cycling and reduces the amount of water in the hydronic circuit (Carrier patent).
- Components are specifically designed for R-410A refrigerant. All units have been submitted to the necessary laboratory tests to ensure perfect operation.
- Latest-generation low-noise fans, now even quieter, as they do not generate intrusive low-frequency noise.
- Scroll or rotary compressors run quietly and vibration-free and are known for their durability and reliability. They are maintenance-free.
- Air management system, consisting of the propeller fan, orifice and air discharge grille, guarantees minimised sound levels.
- Wide temperature operating range: units can operate efficiently in extreme temperature conditions. They can work at low-ambient conditions (down to -10°C and up to 46°C outside temperature).
- Compact unit dimensions, reduced weight and easy access to all internal components facilitate installation.
- HMI graphic service interface or computer-based dealer service tool can be used to monitor and set unit operating parameters. The dealer service tool connection kit includes the software and connections to monitor the operating parameters from a PC, giving an easy-to-read display with visual graphs and statistics indicators.
- Specially shaped anchorage feet ensure correct and safe unit fixing to the foundation.
- Increased energy efficiency at part load - the result of a long qualification and optimisation process.
- Reduced maintenance costs

Physical data

30RB		008	012	015
 Air conditioning application as per EN14511-3:2011				
Condition 1				
Nominal cooling capacity	kW	8.0	10.8	14.0
EER	kW/kW	3.10	2.93	2.91
Eurovent class, cooling		A	B	B
ESEER	kW/kW	3.30	3.24	3.09
Condition 2				
Nominal cooling capacity	kW	10.1	15.0	17.7
EER	kW/kW	3.70	3.65	3.43
Condition 3*				
Nominal cooling capacity	kW	5.1	7.0	8.4
EER	kW/kW	2.24	1.95	1.90
Air conditioning application (1)				
Condition 1				
Nominal cooling capacity	kW	8.0	10.9	14.1
EER	kW/kW	3.17	3.01	3.00
Eurovent class, cooling		B	B	B
Condition 2				
Nominal cooling capacity	kW	10.2	15.1	17.9
EER	kW/kW	3.83	3.80	3.59
Condition 3*				
Nominal cooling capacity	kW	5.1	7.0	8.5
EER	kW/kW	2.27	1.98	1.93
Operating weight with/without hydronic module**	kg	75.5/73.3	114/108	116/110
Refrigerant charge (R410A)**		2.15	2.63	3.18
Compressor		One hermetic rotary compressor	One hermetic scroll compressor	One hermetic scroll compressor
Evaporator		Plate heat exchanger		
Condenser		Copper tubes and aluminium fins		
Hydronic circuit				
Net water volume	l	1.0	2.3	2.3
Expansion tank capacity	l	2	2	2
Maximum water-side operating pressure	kPa	300	300	300
Fans		Propeller fans with three blades, diameter 495 mm		
Quantity		1	2	2
Dimensions				
Length x depth x height	mm	908 x 350 x 821	908 x 350 x 1363	908 x 350 x 1363

NOTE: For the conditions please refer to page 31.

- * Condition 3: Cooling mode conditions: evaporator water entering/leaving temperature 0°C/-5°C, outside air temperature 35°C, evaporator fouling factor 0 m² K/W, with 20% ethylene glycol.
 ** Weight shown is a guideline only. To find out the unit refrigerant charge, please refer to the unit nameplate.

Electrical data

30RB		008	012	015
Power circuit				
Nominal power supply ± 6%	V-ph-Hz	400-3-50 + neutral	400-3-50 + neutral	400-3-50 + neutral
Control circuit supply				
		24 V via internal transformer		
Maximum start-up current (Un)*	A	30	66	73
Maximum power input**	kW	3.1	4.4	5.5
Nominal operating current draw***	A	4.5	6.3	9.1

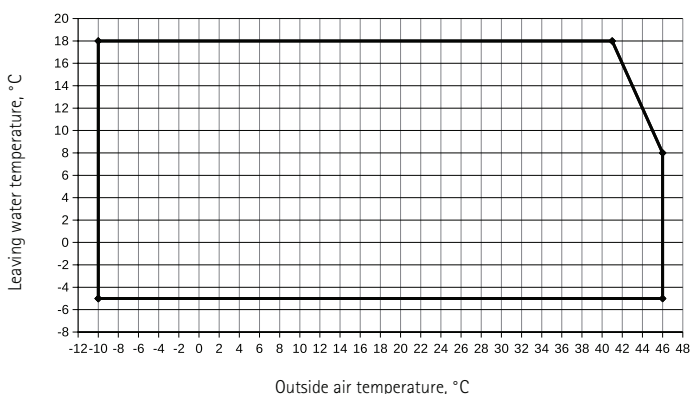
* Maximum instantaneous start-up current (locked rotor current of the compressor).

** Power input, compressors and fans, at the unit operating limits (saturated suction temperature 10°C, saturated condensing temperature 65°C) and nominal voltage of 400 V (data given on the unit nameplate).

*** Standardised Eurovent conditions: water heat exchanger entering/leaving water temperature 12°C/7°C, outside air temperature 35°C.

Operating range

Start-up leaving water temperature 35°C



Clearances, mm

