

AIR-TO-WATER HEAT PUMPS



Heating 30RQ

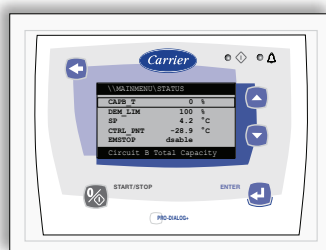
AQUASNAP
Reversible

Options/accessories

- Unit without hydronic module (option)
- Integrated water fill system (option)
- Power supply without neutral (option)
- JBus, BacNet and LonTalk gateways (accessory)
- Remote interface (accessory)
- Integrated water fill system (accessory)

Features

- Four sizes with nominal cooling capacities from 16 to 33 kW and nominal heating capacities from 17 to 33 kW.
- Aquasnap heat pumps for commercial applications such as the air conditioning of offices and hotels.
- Exceptionally high energy efficiency at part load - Eurovent energy efficiency class A and B (in accordance with EN14511-3:2011) in cooling and heating mode.
- Integrates the latest technological innovations: ozone-friendly refrigerant R-410A, scroll compressors, low-noise fans and auto-adaptive microprocessor control.
- Units include a hydronic module integrated into the chassis, limiting installation to connection of power supply, water supply and return piping/air distribution ducting.
- Low-noise scroll compressors with low vibration level.
- Vertical air heat exchanger coils with protection grilles on anti-vibration mountings.
- Low-noise fans, now even quieter. Rigid fan installation for reduced start-up noise.
- The unit has a small footprint and is enclosed by easily removable panels.
- Simplified electrical connections.
- Systematic operation test before shipment and quick-test function for step-by-step verification of the instruments, electrical components and motors.
- Maintenance-free scroll compressors and fast diagnosis of possible incidents and their history via the Pro-Dialog+ control reduce maintenance costs.
- Leak-tight refrigerant circuit.
- Corrosion resistance tests, accelerated ageing test on compressor piping and fan supports and transport simulation test on a vibrating table in the laboratory.



Pro-Dialog+ operator interface



Hydronic module (sizes 026-033 shown)

Physical data

30RQ		017	021	026	033
Air conditioning application as per EN14511-3 : 2011					
Condition 1/condition 2					
Nominal cooling capacity	kW	16.0/22.2	20.2/27.4	26.7/34.3	32.7/43.6
EER	kW/kW	3.17/4.02	3.11/3.76	3.01/3.62	3.21/3.96
Eurovent class, cooling (condition 1)		A	A	B	A
ESEER (condition 1)	kW/kW	3.61	3.44	3.36	3.58
Air conditioning application**					
Condition 1/condition 2					
Nominal cooling capacity	kW	16.2/22.5	20.4/27.7	27.0/34.7	33.1/44.2
EER	kW/kW	3.29/4.27	3.24/4.00	3.13/3.84	3.36/4.25
ESEER (condition 1)	kW/kW	3.77	3.60	3.51	3.77
Heating application as per EN14511-3:2011*					
Condition 1/condition 2					
Nominal heating capacity	kW	17.0/17.6	21.7/22.2	29.9/31.0	33.3/34.7
COP	kW/kW	3.18/3.99	3.28/3.98	3.20/3.98	3.19/3.98
Eurovent class, heating (condition 1)		B	A	A	B
Heating application**					
Condition 1/condition 2					
Nominal heating capacity	kW	16.8/17.4	21.4/22.0	29.6/30.7	33.0/34.3
COP	kW/kW	3.24/4.10	3.35/4.10	3.27/4.10	3.26/4.10
Operating weight*					
Standard unit with/without hydronic module*	kg	206/191	223/208	280/262	295/277
Refrigerant					
R-410A					
Compressor					
One hermetic scroll compressor					
Control					
Pro-Dialog+					
Fans					
			Two twin-speed axial fans, 3 blades		One twin-speed axial fan, 7 blades
Air flow	l/s	2217	1978	3530	3530
Water heat exchanger					
Plate heat exchanger					
Air heat exchanger					
Copper tubes and aluminium fins					
Unit with hydronic module					
Power input	kW	0.54	0.59	0.99	1.10
Nominal operating current	kW	1.30	1.40	2.40	2.60
Dimensions					
Length x depth x height	mm	1136 x 584 x 1579	1136 x 584 x 1579	1002 x 824 x 1790	1002 x 824 x 1790

NOTE: For the conditions please refer to page 69.

* Weight shown is a guideline only. To find out the unit refrigerant charge, please refer to the unit nameplate.

Electrical data

30RQ		017	021	026	033
Power circuit					
Nominal power supply	V-ph-Hz	400-3-50 ± 10%			
Control circuit supply					
24 V via internal transformer					
Maximum start-up current (Un)*	A	75	95	118	118
Maximum operating power input**	kW	7.8	9.1	11	13.8
Nominal unit operating current draw***	A	8	12	16	17

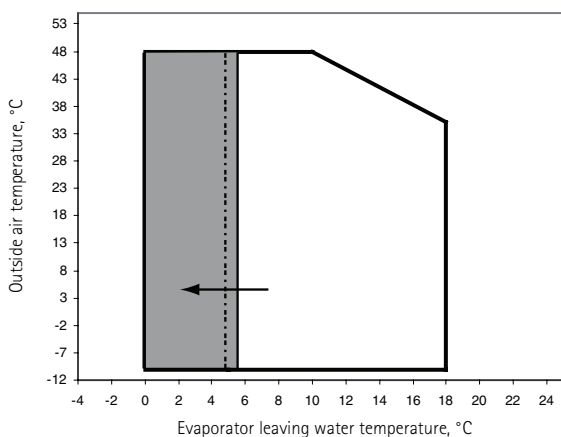
* Maximum instantaneous start-up current (locked rotor current of the compressor).

** 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.

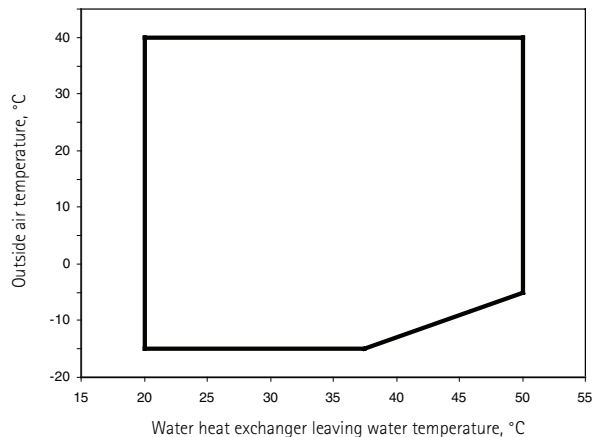
Operating range

Cooling mode



Operating range with anti-freeze solution and Pro-Dialog configuration.

Heating mode



DUCTABLE AIR-TO-WATER HEAT PUMPS



Heating 30RQY

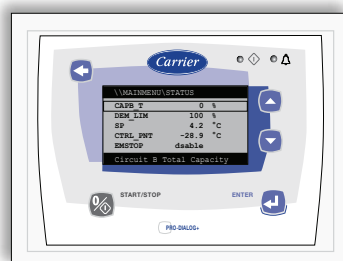
AQUASNAP
Reversible

Options/accessories

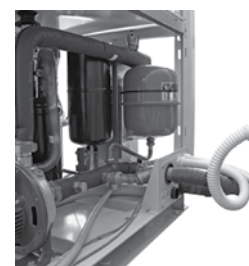
- Hydronic module (option)
- Integrated water fill system (option/accessory)
- Inlet duct frame (option)
- Inlet filter frame (option)
- JBus, BacNet and LonTalk gateways (accessory)
- Remote interface (accessory)
- Condensate drain pan (accessory)

Features

- Four sizes with nominal cooling capacities from 15 to 32 kW and nominal heating capacities from 17 to 31 kW.
- Aquasnap heat pumps for commercial applications such as the air conditioning of offices and hotels.
- Exceptionally high energy efficiency at part load - Eurovent energy efficiency class A and B in cooling mode and C in heating mode (in accordance with EN14511-3:2011).
- Integrates the latest technological innovations: ozone-friendly refrigerant R-410A, scroll compressors, low-noise fans and auto-adaptive microprocessor control.
- Units include a hydronic module integrated into the chassis, limiting installation to connection of power supply, water supply and return piping/air distribution ducting.
- Low-noise scroll compressors with low vibration level.
- Vertical condenser coils with protection grilles on anti-vibration mountings.
- Low-noise fans, now even quieter. Rigid fan installation for reduced start-up noise.
- Easy duct connection and fans with 80 Pa available pressure.
- The unit has a small footprint and is enclosed by easily removable panels.
- Simplified electrical connections.
- Systematic operation test before shipment and quick-test function for step-by-step verification of the instruments, electrical components and motors.
- Maintenance-free scroll compressors and fast diagnosis of possible incidents and their history via the Pro-Dialog+ control reduce maintenance costs.
- Leak-tight refrigerant circuit.
- Corrosion resistance tests, accelerated ageing test on compressor piping and fan supports and transport simulation test on a vibrating table in the laboratory.



Pro-Dialog+ operator interface



Hydronic module, sizes 026-033

Physical data

30RQY		017	021	026	033
Air conditioning application as per EN14511-3 : 2011					
Condition 1/condition 2					
Nominal cooling capacity	kW	14.9/18.4	19.0/23.9	27.1/35.6	32.3/41.3
EER	kW/kW	2.63/2.93	2.63/3.01	2.90/3.54	3.05/3.63
Eurovent class, cooling (condition 1)		B	B	A	A
ESEER (condition 1)	kW/kW	2.91	2.88	3.15	3.30
Air conditioning application**					
Condition 1/condition 2					
Nominal cooling capacity	kW	15.0/18.6	19.2/24.1	27.3/36.1	32.6/41.9
EER	kW/kW	2.72/3.06	2.72/3.15	3.03/3.77	3.19/3.87
ESEER (condition 1)	kW/kW	2.78	2.78	2.97	3.16
Heating application as per EN14511-3:2011*					
Condition 1/condition 2					
Nominal heating capacity	kW	17.0/17.5	20.5/20.8	28.8/29.9	31.4/32.3
COP	kW/kW	2.77/3.38	2.77/3.29	2.76/3.36	2.76/3.34
Eurovent class, heating (condition 1)		C	C	C	C
Heating application**					
Condition 1/condition 2					
Nominal heating capacity	kW	16.9/17.3	20.3/20.6	28.5/29.6	31.1/32.0
COP	kW/kW	2.81/3.45	2.81/3.36	2.81/3.44	2.81/3.42
Operating weight*					
Standard unit (with hydronic module)	kg	226	243	280	295
Standard unit (without hydronic module)	kg	211	228	262	277
Refrigerant		R-410A			
Compressor		One scroll compressor			
Control		Pro-Dialog+			
Fans		Two twin-speed centrifugal fans, 5 backward-curved blades		One twin-speed axial fan, 7 blades	
Air flow	l/s	1640	1640	3472	3472
Evaporator		One plate heat exchanger			
Condenser		Copper tubes and aluminium fins			
Unit with hydronic module		One single-speed pump, screen filter, expansion tank, flow switch, water circuit drain valve, pressure gauge, automatic air purge valve, safety valve			
Dimensions					
Length x depth x height	mm	1135 x 584 x 1608	1135 x 584 x 1608	1002 x 824 x 1829	1002 x 824 x 1829

NOTE: For the conditions please refer to page 69.

* Weight shown is a guideline only. To find out the unit refrigerant charge, please refer to the unit nameplate.

Electrical data

30RQY		017	021	026	033
Power circuit					
Nominal power supply	V-ph-Hz	400-3-50 ± 10%			
Control circuit supply					
24 V via internal transformer					
Maximum start-up current (Un)*	A	75	95	118	118
Maximum operating power input**	kW	8.0	9.3	11.2	14.0
Nominal unit operating current draw***	A	13	16	20	24

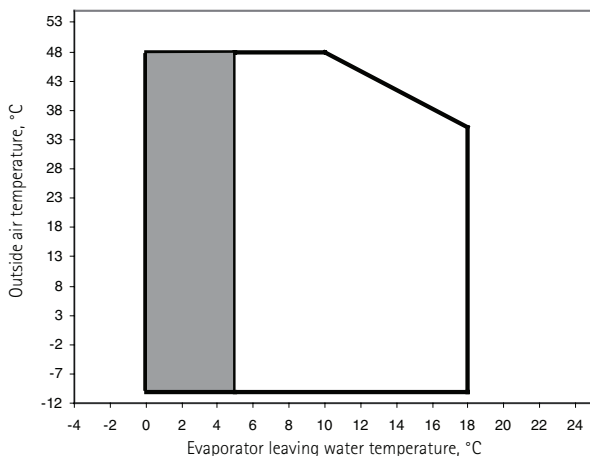
* Maximum instantaneous start-up current (locked rotor current of the compressor).

** 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

Cooling mode



Operating range with anti-freeze solution and Pro-Dialog configuration.

Heating mode

