

WATER-COOLED/CONDENSERLESS LIQUID CHILLERS



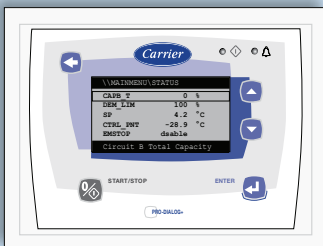
Air conditioning

AQUASNAP

30WG/30WGA

Options

- Very low temperature glycol solution (30WG)
- Soft starter
- Master/slave operation
- External disconnect handle
- Condenser insulation (30WG)
- Low or high-pressure fixed or variable-speed single-pump hydronic module, evaporator side
- Low or high-pressure fixed or variable-speed single-pump hydronic module, condenser side (30WG)
- JBus, BacNet and LON gateways
- Specific cooling control
- Low sound level
- Unit stackable
- Customer water connection at the top of the unit (30WG)
- Evaporator (30WG/30WGA) and condenser (30WG) screw or welded connection sleeves
- Remote user interface



Pro-Dialog+ operator interface

Features

- Eleven sizes with nominal cooling capacities from 23 to 95 kW and exceptionally high ESEER values.
- New generation of liquid chillers designed for commercial (offices, hotels etc.), residential (houses, apartments etc.) or industrial applications (low-temperature cooling).
- 30WG units offer Eurovent energy efficiency class B, and an ESEER of over 5.5 for dual-compressor units - one of the highest in its category.
- Condenserless version possible (30WGA) with remote condenser control box available as an option.
- R-410A refrigerant and scroll compressors.
- Compatible with Carrier 09 series drycoolers/remote condensers.
- Unique combination of high performance and functionality in an exceptionally compact chassis.
- Units include automatic condensing pressure control via three-way valve for optimised operation, even at low outside temperature.
- Reversibility by water flow inversion in the system.
- Pro-Dialog+ control and compatibility with the Aquasmart system
- Units available with connections at the top or at the rear.
- Easy installation: small footprint, ideal for refurbished buildings, allows access in very tight plant rooms.
- The variable water flow (VWF) technology of the variable-flow pump, optimises system operation and enhances energy efficiency.
- Standard low sound level allows installation in any building type.

Physical data

30WG/30WGA		020	025	030	035	040	045	050	060	070	080	090	
Air conditioning application as per EN14511-3 : 2011 – 30WG													
Nominal cooling capacity	kW	24.6	28.7	31.5	36.7	41.8	46.6	58.1	63.4	73.8	83.9	94.6	
EER	kW/kW	4.72	4.72	4.69	4.73	4.69	4.72	4.72	4.65	4.69	4.65	4.68	
Eurovent class		B	B	B	B	B	B	B	B	B	B	B	
Part load performance ESEER	kW/kW	5.10	5.09	5.03	5.05	5.03	5.07	5.83	5.90	5.79	5.99	5.93	
Air conditioning application (1) – 30WG													
Nominal cooling capacity	kW	24.7	28.8	31.6	36.9	42.0	46.8	58.3	63.6	74.0	84.1	94.8	
EER	kW/kW	4.93	4.94	4.93	4.96	4.93	4.96	4.90	4.82	4.88	4.84	4.87	
Part load performance ESEER	kW/kW	5.35	5.35	5.30	5.32	5.32	5.36	6.31	6.38	6.30	6.54	6.44	
Air conditioning application as per EN14511-3 : 2011 – 30WGA													
Nominal cooling capacity	kW	22.6	27.0	29.5	34.7	39.2	43.7	53.7	59.8	69.2	78.3	87.8	
EER	kW/kW	3.75	3.84	3.87	3.93	3.94	3.90	3.82	3.85	3.86	3.91	3.88	
Air conditioning application (1) – 30WGA													
Nominal cooling capacity	kW	22.7	27.1	29.6	34.8	39.4	43.8	53.8	59.9	69.4	78.4	88.0	
EER	kW/kW	3.80	3.91	3.94	4.00	4.02	3.98	3.86	3.89	3.91	3.95	3.93	
Operating weight 30WG/30WGA*	kg	191/164	200/171	200/171	207/177	212/180	220/185	386/321	392/324	403/332	413/339	441/354	
Compressors													
		Hermetic scroll 48.3 r/s											
Quantity		1	1	1	1	1	1	2	2	2	2	2	
Number of capacity stages		1	1	1	1	1	1	2	2	2	2	2	
Minimum capacity	%	100	100	100	100	100	100	50	50	50	50	50	
Dimensions, standard unit**													
Width x depth x height	mm	600 x 1044 x 901						880 x 1474 x 901					
Refrigerant*													
		R-410A											
Control													
		Pro-Dialog+											
Evaporator													
		Direct-expansion plate heat exchanger											
Condenser (30WG only)													
		Plate heat exchanger											

NOTE: For the conditions please refer to page 31. 30WGA performance are given for an equivalent refrigerant piping length (without filter drier and valves) of 3 m.

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

** The dimensions shown are for the standard unit. For other unit types please refer to the dimensional drawings.

Electrical data

30WG/30WGA		020	025	030	035	040	045	050	060	070	080	090
Power circuit												
Nominal voltage	V-ph-Hz	400-3-50 ± 10%										
Control circuit supply												
		24 V, via internal transformer										
Maximum start-up current draw (Un)*												
Standard unit, 30WG	A	98	142	142	147	158	197	163	165	174	188	233
Standard unit, 30WGA	A	98	142	142	147	158	197	160.7	161.8	170.2	183.4	226
Unit with electronic starter option, 30WG	A	53.9	78.1	78.1	80.9	86.9	108.4	100.1	102.1	108.9	117.9	144.4
Unit with electronic starter option, 30WGA	A	53.9	78.1	78.1	80.9	86.9	108.4	96.8	97.9	104.1	112.3	137.4
Maximum operating power input, 30WG**	kW	9.1	10.7	11.7	13.6	15	17	21.4	23.4	27.2	30	34
Maximum operating power input, 30WGA**	kW	8.7	10.2	11.3	12.5	14.2	16.1	20.4	22.6	25.0	28.5	32.2
Maximum operating current draw (Un), 30WG***	A	15.6	18.7	19.8	23.2	25.4	29	37.4	39.6	46.4	50.8	58
Maximum operating current draw (Un), 30WGA***	A	14.7	17.7	19.3	21.7	24.1	27.5	35.4	38.7	43.5	48.1	55.0

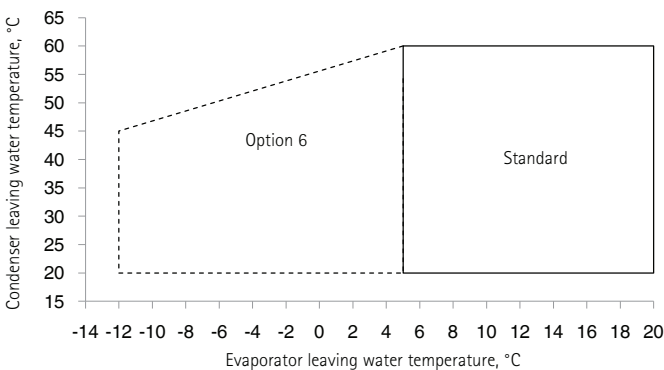
* Maximum instantaneous start-up current at operating limit values (maximum operating current of the smallest compressor(s) + fan current + locked rotor current of the largest compressor).

** Maximum power input at the unit operating limits.

*** Maximum unit operating current at maximum unit power input and 400 V.

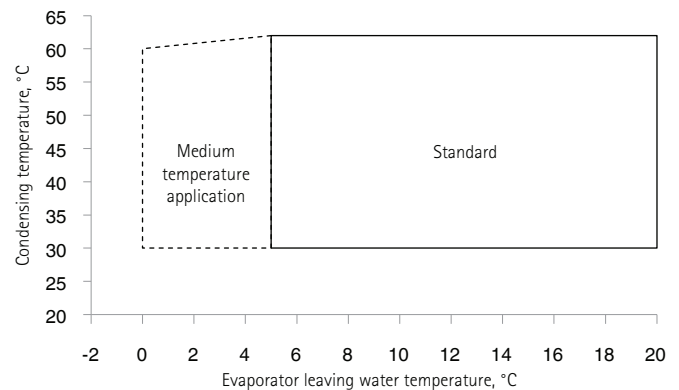
Operating range

30WG



— 30WG standard unit
 - - - 30WG unit with option 6 (brine)
 Option 6: Very low-temperature glycol solution

30WGA



— 30WGA standard unit
 - - - 30WGA unit for medium temperature application (% glycol < 25%)