



AIR CONDITIONING SOLUTIONS



Water to water liquid chillers

**30WG**

20-100 kW

**AQUASNAP**

# A new Carrier unit – **designed for cooling**



## **The latest addition to the Aquasnap range**

The new generation of water-cooled chillers has been designed for industrial and commercial cooling applications. With an ESEER rating above 5, the 30WG operating costs are among the best on the market with short payback time. The many options of the 30WG include variable water flow pumps, reinforced sound insulation, stackability, master/slave control of two units and water production down to -12°C. This makes it a unique combination of superior performance and energy-efficiency.

## **Choose Carrier quality**

Carrier offers you a tailor-made product that meets European standards. Our units are designed to provide increased comfort, reduced energy consumption and easy installation. Choosing Carrier means choosing guaranteed quality!

## **Make it simple with Carrier service!**

Wherever you are, there is always a competent team nearby to help. How? Simply connect to [www.carrier.com](http://www.carrier.com) to find spare parts and all the information you need.



Carrier participates in the ECC programme for Liquid Chilling Packages. Check ongoing validity of certificate: [www.eurovent-certification.com](http://www.eurovent-certification.com) or [www.certiflash.com](http://www.certiflash.com)

*\* models so marked are not ECC certified*



### **Carrier GREEN**

The environment and personal comfort are longstanding priorities for Carrier. The new 30WG air conditioning unit meets the most demanding environmental regulations.

- Its compatibility with the Aquasnap Touch Pilot System helps reduce energy consumption
- The range is Eurovent-certified
- The amount of copper and steel used for the manufacture of 30WG was reduced by 44 and 41%. The amount of refrigerant was also reduced by 10% over the previous range.



## A modular and compact range suitable for many applications

- -12 °C to 20°C leaving water temperature: ideal for light commercial and industrial applications
- 5 to 10% smaller footprint than conventional solutions: key for unit replacement
- 60°C leaving water temperature when used in heating mode as a reversible unit on water side.



### Carrier SERVICE

#### Three easy steps to order spare parts

Our website [www.carrier.com](http://www.carrier.com) gives you direct access to spare parts. It provides references, item availability and uses a simple three-step order process:

- browse for the item
- check availability
- download the order form!



# Energy-efficient, compact, competitive

## Superior features



### Simple to install and easy to maintain

#### ■ 100% compatible

The 30WG can connect to any source; weld or drycooler.

#### ■ Flexible water connections

Designed for quick installation, the unit offers easy water connections either from the top or rear.

#### ■ Stackable to save space

If water connections are at the back, two units can be stacked to save space and allow staged operation master/slave option.

#### ■ Compact performance design

The small unit size results in a minimal footprint. The 30WG easily fits through a door or in a lift.

#### ■ Easy maintenance

All components are easily accessible, and there is only one screw type and size for the entire chassis.



### Enjoy peace and quiet!

The sound level is one of the lowest on the market from 67 to 73.4 dB(A) in full load on which a low sound option of -3dBA can be deducted.

ive...  
in a unique unit



### Designed to make air conditioning easy

#### ■ Drycoolers for increased energy efficiency

Carrier offers a wide range of drycoolers compatible with this new range, available with extended control features.

#### ■ Maximum safety and reliability

Condensing pressure valve control allows unit operation with drycoolers in cold outdoor weather.

#### ■ Domestic hot water 60°C

This unit can heat domestic water up to 60°C on the source side when cooling on the terminal unit side.

■ **Reversible** in the water side 30WG can be controlled on evaporator or condenser side to provide heating or cooling as standard.



### Reduce your energy bill

#### ■ Variable water flow pump to reduce your operating costs

The optional hydronic kit is available with a self-adjusting circulating pump to ensure optimised unit operation and reduced running costs. This option is available in both evaporator and condenser sides. Variable water flow pump can be controlled on  $\Delta t$  of constant pressure.

#### ■ Optimise comfort and savings with Aquasmart

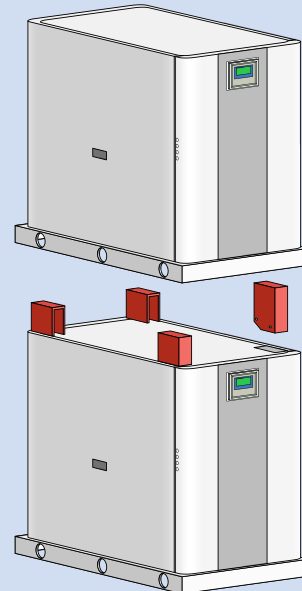
The 30WG can be integrated into the Aquasmart Touch Pilot system, offering time scheduling and zone management to ensure increased comfort and minimised energy consumption.

# A range of options **adapts** **the 30WG to your needs**



## Hydronic kit and water connections

- Units can be supplied with a hydronic kit either on the condenser or evaporator side.
- The hydronic kit includes a circulating pump, valves and an expansion vessel.
- The circulating pump can either be fixed speed or with variable water flow.
- Three control modes for reduced energy consumption:
  - Unit monitoring for maximised performance
  - Constant  $\Delta t$  ( $^{\circ}\text{K}$ )
  - Constant pressure



## Stackable unit

- The stackable option allows a significant system footprint reduction and easier installation in a small plant room. This option is available for units with the water connections at the rear.



## Aquasnap Touch Pilot System Manager optimises up to 128 zones

- Zoning and time scheduling manage the heating space and times, ensuring enhanced comfort.
- Free-cooling system reduces energy consumption by up to 2 kWh/m<sup>2</sup> a year.
- Variable-speed pumps with reduced water flow at part-load conditions for significant savings.
- A new generation of heat pumps guaranteed for superior energy efficiency.

## Physical data

30WG		020	025	030	035	040	045	050	060	070	080	090
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
Power input	kW	5.2	6.1	6.7	7.8	8.9	9.9	12.3	13.6	15.7	18.1	20.2
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, cooling		B	B	B	B	B	B	B	B	B	B	B
Part load performance ESEER	kW/kW	5.09	5.09	5.02	5.04	5.03	5.07	5.84	5.91	5.84	6.04	5.98
Heating capacity	kW	29.8	34.7	38.1	44.4	50.7	56.4	70.3	76.9	89.4	101.8	114.5
Coefficient of performance (COP)	kW/kW	5.71	5.71	5.68	5.72	5.68	5.71	5.71	5.64	5.68	5.64	5.67
Nominal cooling capacity**	kW	33.9	39.3	43.0	50.1	56.6	65.6	78.6	86.0	101.7	113.2	129.4
Power input	kW	5.3	6.4	7.1	8.3	9.6	10.8	12.8	14.4	16.4	19.1	21.1
EER	kW/kW	6.42	6.10	6.03	6.04	5.90	6.06	6.12	5.95	6.19	5.93	6.13
Eurovent class, cooling		A	A	A	A	A	A	A	A	A	A	A
Heating capacity	kW	39.1	45.7	50.1	58.3	66.1	76.4	91.3	100.3	118.0	132.1	150.3
Coefficient of performance (COP)	kW/kW	7.41	7.09	7.02	7.04	6.89	7.05	7.11	6.95	7.18	6.92	7.12
Nominal cooling capacity***	kW	20.0	23.5	25.2	29.6	34.1	37.5	46.8	52.3	57.6	67.1	73.5
Power input	kW	8.1	9.2	10.0	11.8	13.2	14.9	18.7	20.7	23.6	25.6	29.7
EER	kW/kW	2.48	2.54	2.51	2.49	2.57	2.52	2.51	2.53	2.44	2.62	2.47
Heating capacity	kW	28.0	32.6	35.1	41.3	47.2	52.2	65.2	72.7	81.0	92.4	102.9
Coefficient of performance (COP)	kW/kW	3.47	3.54	3.50	3.48	3.56	3.51	3.50	3.52	3.43	3.61	3.46
Sound levels****												
Sound power level	dB(A)	67.0	68.5	69.0	69.3	70.0	70.1	71.5	72.0	72.0	73.0	73.4
Operating weight	kg	191	200	200	207	212	220	386	392	403	413	441
Dimensions, standard unit*****												
Width	mm	600	600	600	600	600	600	880	880	880	880	880
Depth	mm	1044	1044	1044	1044	1044	1044	1474	1474	1474	1474	1474
Height	mm	901	901	901	901	901	901	901	901	901	901	901

## Options

- Brine to water
- Stackability
- Communication protocols: JBus, BacNet, LonTalk
- Master/slave control for staged multiple-unit operation
- External main switch
- Remote human interface
- Soft starter
- Top or rear water connections

Note: All performances are net values as specified by EN14511-3 2011.

\* Eurovent conditions in cooling mode: evaporator water entering/leaving temp. = 12°C/7°C, condenser water entering/leaving temp. = 30°C/35°C, evaporator and condenser fouling factor = 0

\*\* Conditions in cooling mode, chilled beam and under-floor cooling: evaporator water entering/leaving temp. = 18°C/23°C, condenser water entering/leaving temp. = 30°C/35°C, evaporator and condenser fouling factor = 0

\*\*\* Conditions in cooling and heating mode (domestic hot water production): evaporator water entering/leaving temp. = 12°C/7°C, condenser water entering/leaving temp. = 50°C/55°C, evaporator and condenser fouling factor = 0

\*\*\*\* In accordance with ISO 9614-1, measured in a free field. The sound levels only apply to units without options.

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



## **Carrier, for environment leadership**

Carrier believes that industry leadership demands environmental leadership. In fact, environmental stewardship is one of Carrier's core values. Carrier continuously works to improve the environmental performance of its products and services, operations and culture to help achieve a sustainable society.

## **Carrier, for performance**

Carrier strives for continuous growth to reinforce its leadership position, achieve world-class financial performance and continuously improve the productivity of its assets and resources.

## **Carrier, for innovation**

Carrier is a company of ideas, committed to research and development, whose founder inspires the company to reach the next innovative, powerful and marketable idea.

## **Carrier, for service**

The Carrier service delivery model maintains a reputation for high customer satisfaction and delivers service excellence with strong communication channels, industry-leading technicians, continuous improvement of contracts and a highly experienced management team.

## **Carrier, to be your expert**

Carrier delivers global solutions across the broadest range of heating, cooling and refrigeration applications. With a proven track record of leadership and industry expertise, we are here to meet your needs with our portfolio of market-leading products and services.

Your retailer:

[www.carrier.com](http://www.carrier.com)



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