



AIR TREATMENT SOLUTIONS



ROOFTOP UNIT

Cooling kw 40-120

Heating kw 40-120

48/50UA/UH

A packaged solution, all in one application

Trust the leader in **air conditioning** and **refrigeration**



100 years of experience

Carrier has designed and manufactured refrigeration and air conditioning systems for over a century. With sustainable solutions, such as the CO₂OLtec refrigeration range and Aquasnap chillers, Carrier has always innovated to offer a range of premium solutions.

A rooftop range incorporating Carrier Aquasnap chiller innovations

The innovative refrigerant circuit technology developed by Carrier for the Aquasnap chillers, has now been integrated into this rooftop unit range. Enjoy Carrier's best!

Connect to a strong network

Choosing Carrier also means connecting to a worldwide network for assistance, commissioning and spare parts. This efficient network is the guarantee of responsiveness and top service. For every need, the EMEA Replacement Component Division is there to offer you support.

You trust Carrier in refrigeration? You can count on us for HVAC!

Developing a partnership with Carrier means one-stop shopping for refrigeration as well as for ventilation. For maintenance and spare parts, choosing one partner can save you time and make your life easier!



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

** models so marked are not ECC certified*

Carrier GREEN



Carrier, your green partner

The environment and personal comfort are longstanding priorities for Carrier. The company policies, product innovations and processes are focused on environmental sustainability and improving human comfort. This commitment also applies for this rooftop unit range that:

- Is produced in a ISO 14001 factory
- Uses technologies that reduce energy consumption
- Is Eurovent certified class A, B and C

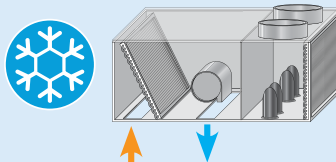


A packaged system, an all in one application

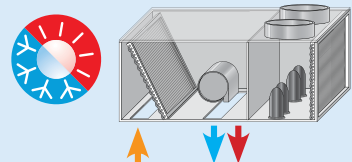
Dual energy heatpump: gas or hot water coils or electrical heating

- Rooftop units are versatile and efficient air conditioners, designed for outside installation
- The most cost-effective self-contained air-conditioning units for medium and large retail applications or warehouses
- Ideal for both new and retrofitted buildings
- A new range of rooftop units – cooling only, reversible heat pumps with dual-energy options (gas or hot-water coils, or electric heaters), and ventilation

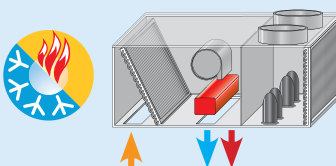
■ 50UA cooling only units



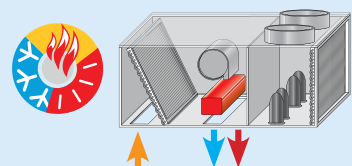
■ 50UH reversible heat pumps



■ 48UA cooling only and gas burner units



■ 48UH reversible heat pumps and gas burner units



- ➡ Cooling supply air
- ➡ Heating supply air
- ➡ Return air

Discover the R410A Rooftop Unit, the **best all-in-one value!**



Superior reliability

- **Refrigerant leak-free:** an innovative, environmentally sound refrigerant circuit technology, taken from the new generation of Aquasnap chillers
- **Efficient in every climate:** compressor map optimisation enhances performance from -10 to 48°C
- **Safe construction:** fire class M0 with full insulation and aluminium foil
- **Coil defrosting:** patented coil defrost algorithm allowing stable supply air temperature, alternative on refrigerant circuits, dual heating operation



Save energy and money!

- **Renewable energy source** for heat pump units
- **Maximised performance:** the energy recovery module (ERM) recovers 90% of the heat from the exhaust air using a high-efficiency heat-recovery wheel and variable air flow (option)
- **Economiser:** free cooling option using fresh outdoor air
- **Desired temperature on request:** up to four capacities stages help optimise part-load energy efficiency
- **Dual energy heat pump:** with gas or hot water heating options, to guarantee comfort all year round
- **Wise energy use:** thermostatic or enthalpy economizer control for fresh supply air, allowing intelligent free cooling and energy savings
- **Advanced Pro-Dialog+** control, auto-adaptability, energy-management focus, 7-day time schedule, all with great operating simplicity
- **Environmentally responsible:** certified Eurovent class A, B and C



Air quality, our priority

- **Ensure clean fresh air** with high-efficiency filters (G4/F7)
- **Renew the air in the required quantity:** economizer fitted with on-demand ventilation with CO₂ sensors to guarantee constant air quality



Easy maintenance

- **Service:** the European Carrier Service Team is at your disposal
- **Plug-and-play:** power and control wiring is easy to connect to the rooftop unit control box
- **Small footprint:** easy replacement solution
- **Minimise maintenance cost** with dirty-filter detection
- **Easy access to all components**
- **Manage your rooftop unit with Pro-Dialog+:** a user-friendly interface controls all parameters (including override mode allows uninterrupted unit operation, even if there is a fault)



Carrier SERVICE

Best in class service organisation

Our website www.carrier.com gives you direct access to spare parts. It provides references, item availability and uses a simple three - steps order process:

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

Plug and play high efficiency **energy recovery module (ERM)** option



The ERM is an individual compact dual-flow unit, equipped with a high-efficiency heat recovery wheel, with an integrated variable-air-volume plug fan and a control system for plug-and-play installation, offering four main benefits:

- Recovers up to 90% of the energy from exhaust air to pre-heat/pre-cool the fresh air
- Up to 100% fresh-air operation for both mechanical cooling/heating and free cooling
- Variable exhaust air volume (no building pressurisation)
- Easy installation: power and control cables connected to the rooftop unit, field-installed extract/supply air ducts

Air-to-air high-efficiency Eurovent certified heat recovery wheel reclaims up to 90% of the heat from the extracted air and transfers it to the supply air, considerably reducing the thermal load on the heating and air conditioning equipment.



High-efficiency exhaust air plug fans. The fan speed is independently controlled by frequency inverters directly connected to the Pro-Dialog+ control inside the rooftop unit.



Performance table

Heat pumps		48/50UH045	48/50UH055	48/50UH065	48/50UH075	48/50UH085	48/50UH100	48/50UH120
Cooling capacity	kW	44	50	59	69	85	97	109
EER		3.03	2.83	2.86	2.60	3.07	2.86	2.81
Eurovent energy class, cooling		A	B	B	C	A	B	B
Heating capacity	kW	44	54	62	75	85	99	121
COP		3.30	3.41	3.09	3.00	3.49	3.20	3.22
Eurovent energy class, heating		B	A	C	C	A	B	B
Cooling only		48/50UA045	48/50UA055	48/50UA065	48/50UA075	48/50UA085	48/50UA100	48/50UA120
Cooling capacity	kW	44	51	61	72	89	103	115
EER		3,06	2,85	2,88	2,65	3,10	3,00	2,84
Eurovent energy class, cooling		A	B	B	C	A	A	B
Nominal air flow rate	m³/h	9000	12500	12500	14200	20000	20000	22000
	l/s	2500	3470	3470	3940	5560	5560	6110
Outdoor fan sound power level	dB (A)	86.5	84.4	90.6	90.6	90.7	91.0	91.0

Technical data

Refrigerant		R410A						
# Circuits / # Comp. / Type		1 / 1 / scroll	1 / 2 / scroll	2 / 2 / scroll	2 / 2 / scroll	2 / 2 / scroll	2 / 3 / scroll	2 / 4 / scroll
Capacity steps		1	2	2	2	2	3	4
50UH weight (without options)	kg	755	900	970	980	1430	1520	1565
48UH weight (without options)	kg	820	965	1043	1053	1565	1655	1700
Length	mm	2125	2125	2125	2125	3582	3582	3582
Width	mm	2194	2194	2194	2194	2198	2198	2198
Height	mm	1413	1442	1796	1796	1825	1825	1825

Energy Recovery Module option		ERM13	ERM18
ERM weight	kg	520	700
Length	mm	1610	1775
Width	mm	1646	1965
Height	mm	1792	2076

Capacities are based on nominal Eurovent conditions:

Cooling: outdoor air temperature 35°C db, indoor air temperature 19°C wb

Heating: outdoor air temperature 6°C wb, indoor air temperature 20°C db

Options

- Dual heating: gas burners, electric heaters, hot water coils
- Economizer: thermostatic or enthalpy control and on-demand ventilation with CO₂ sensors
- Compact energy recovery module (ERM)
- High-efficiency filtration (G4/F7)
- Power exhaust and return air fans
- Smoke detection and fire thermostat
- Dirty-filter and air flow detection
- Multi-protocol communications

Accessories

- Vertical roof curbs
- Adjustable longitudinal and transversal vertical roof curbs
- Horizontal roof curbs
- Transition French ERP roof curbs
- Remote HMI Pro-Dialog+
- Room and duct temperature sensors





Carrier, for environment

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 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, 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, 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, Carrier is here to meet your needs with our portfolio of market-leading products and services.

Your retailer:

www.carrier.com



turn to the experts™



**United
Technologies**

Climate | Controls | Security