



A complete line of reliable products for all marine refrigeration and air conditioning applications















### Cruise Industry

Get on board with reliable, efficient solutions for your cruise ship.

When it comes to leisure cruises, comfort is critical. Carrier Marine & Offshore Systems offers a broad range of efficient, customizable solutions designed for comfort control, as well as air quality, refrigeration, process cooling and more.

Industry leaders—We are the world's leading supplier of chillers to the cruise industry.

Advanced technology—Consistent innovators, our products and technology are essential components on some of the most advanced cruise ships at sea.

Service expertise—Our service team is unparalleled, comprised of world-class engineers who are available to assist with virtually any marine project.

In 1930, Carrier equips the *S.S. Victoria* with air conditioning, making it the first cruise ship to employ this technology for passenger comfort.



# Take to the sea with the world leader in Marine HVAC&R

Carrier Marine & Offshore Systems has been the global leader in maritime air conditioning and refrigeration technology since we pioneered the first shipboard use of air conditioning. Today, Carrier Marine & Offshore Systems products are found aboard cruise ships, commercial vessels and offshore rigs throughout the world's oceans.

### Featured Products for the Cruise Industry



### AquaEdge® 19XR Water-Cooled Centrifugal Chiller

- Control comfort and process cooling with a cost-effective, reliable, simple-tooperate solution
- High-efficiency, two-stage, positive-pressure centrifugal chiller with a hermetic compressor motor
- Uses an environmentally preferable chlorine-free refrigerant (HFC-134a)
- Variable speed drive option available



### Airovision 39HQ Air Handling Units

- Fully customizable modular platform designed to meet the needs of any cruise application
- Long service life and low maintenance costs; stainless steel marine double drain pans
- Lower operating costs, due to high-efficiency components and thermal break design
- Multiple filtration, fan, and coil options, along with heat recovery, humidifier, and alternative materials



### Carrier i-Vu® Open Automation System

- Manage your ship's systems anywhere with an advanced automation system that features a web-based user interface
- Includes intuitive graphic controls, plug-and-play controllers, dynamic comfort indicators, and an automated troubleshooter
- i-Vu® Open Plus adds advance reporting, web-services data exchange, and more

#### Carrier AdvanTE3C Solutions Center

Carrier solutions are developed with a responsibility to both the environment and the specific needs of our customers in mind. To achieve this, our AdvanTE³C Solutions Center brings together a global group of Experts in Efficiency and Environment focused on developing sustainable solutions for marine applications.



The Center works with customers to understand project goals, customer needs, and efficiency requirements to design better solutions and apply innovative technologies that increase value for our customers while decreasing the impact on our planet.

### Offshore Industry

### When you're stationed offshore, the right cooling solutions can be a valuable resource.

With limited space, harsh climates and demanding work conditions, there are few environments on Earth that are more challenging to maintain than offshore platforms. Carrier Marine & Offshore Systems is up for this challenge, offering a number of efficient, customized solutions for comfort cooling, process cooling, and refrigeration.

Safer products—Our products are built tough to perform safely and efficiently in the world's most demanding situations. Many of our products can be customized for hazardous locations, using NEC, NFPA 70, Chapter 5, Article 500 or ATEX construction methods.

Custom solutions—Chillers, condensing units, air handlers, and refrigeration equipment can be customized to meet any challenge, including special coatings, copper coil construction, SS316L cabinet construction, and other specialized needs.

Maximum value—Each chiller, condensing unit, and air handler is packaged with features that provide high performance, energy efficiency, and on-demand control.



### Featured Products for the Offshore Industry





### Aqua Series Air-Cooled Chillers AquaSnap™ 30RB AquaForce® 30XA

- Save time and money with easy-to-install air-cooled chillers that can help dramatically lower operating costs
- ComfortLink<sup>™</sup> control system makes units easy to monitor and control
- High-efficiency scroll compressor and Puron® refrigerant (30RB) or high-efficiency screw compressor and R-134a refrigerant (30XA)
- Robustly built for quiet operation and safety, units feature a heavy-gauge steel frame and are available with many customizations to suit your specific needs, such as copper fin coils





# Gemini<sup>™</sup> High-Efficiency Condensing Units (38AU, 38AH, 38AP)

- Meet the specific requirements of your facility with a pre-engineered commercial split system
- Available in a wide range of capacities and installation options
- Features state-of-the-art direct digital control (DDC) and a simple control interface for optimal performance
- Robustly built with copper fin coils, stainless steel cabinets and many other customizations to suit your specific needs



### AERO® 39M Air Handlers

- Customize your central station air handler with advanced technology and features designed to meet the needs of any offshore rig
- Features Energy Recovery Ventilator sections
- Can be equipped with an AgION™ antimicrobial coating, HEPA filters, stainless steel quad-sloped drain pans, UV-C germicidal lamps and plenum fans for extra quiet operation

### Commercial Marine Industry

Each day, billions of people rely on commercial ships, ferries, tugs, and naval vessels to transport them and their goods where they are needed around the world. That's why, as a manager of one of these ships, you can rely on Carrier Marine & Offshore Systems to provide the air conditioning and refrigeration systems to keep your vessel—and its cargo—properly cooled.

Carrier Marine & Offshore Systems provides solutions for the following:

- Bulk carriers
- Container ships
- Fishing boats
- Passenger ferries

- Dinner cruise boats
- Casino boats
- Mega yachts
- Military support vessels





### Featured Products for the Commercial Marine Industry



### Marine Packaged Cooling Unit 90MA

- Whether you use it as a free blow unit or for ducted air, the unit cools, heats, dehumidifies, and filters
- Specifically designed to fit aboard a ship or rig—on the bridge, in the control room, or wherever environmental control and human comfort is needed
- Features quick sensing elements, crankcase heaters to prevent flooded starts, a seawater regulating valve and corrosion-resistant paint



#### 90MPS Marine Scroll Chillers

- Compact, modular design utilizing efficient scroll compressors
- "Green" design using non-ozone depleting Puron® refrigerant
- Seawater, freshwater, and condenser-less models to fit a wide variety of applications
- Easy to operate with Carrier's plain language display



### 30HX Marine Water-Cooled Screw Chillers

- Control comfort and process cooling with a cost-effective, reliable, simple-to-operate solution
- Compact, modular design, ideal for new construction and replacement projects
- Seawater and freshwater models are available
- Proven performance with over 10,000 chillers installed worldwide
- Environmentally-friendly R-134a refrigerant and dual circuits for redundancy



### Sea Horse 90Y Condensing Unit

- Build-to-order DX condensing unit ranging from 5 to 130+ tons
- Freshwater- or Seawater-cooled
- NEMA 4 (IP56) enclosures
- Available with multiple refrigerants, such as R-134a, R-404A, R-407C, R-507A
- Use for comfort cooling or refrigerated stores



### Carrier Marine & Offshore Systems Parts

### Stay full speed ahead with local support and global reach.

Carrier Marine & Offshore Systems supplies more than maritime refrigeration and air conditioning systems. Our Performance Parts Group provides all the parts and related service support you need to keep sailing—no matter where you are in the world.

With more than 600 dealers, distributors and parts depots worldwide, chances are, you'll find an experienced Carrier engineering professional in your key ports. We're there to provide personal service and assist you in obtaining and installing the part you need. And if we don't have it in stock, Carrier Marine & Offshore Systems' parts and service network will locate and ship your replacement parts on the same day they're needed.

Guaranteed quality—Our "performance parts" are of the highest quality, equal to or better than the part originally supplied. If the part doesn't meet this standard, we will replace it or refund the purchase price.

Extensive network—We maintain the most extensive parts inventory, warehouse distribution centers and dealer network in the industry.

Complete support—Our advanced inventory-control system supports the range of parts needed for Carrier equipment and systems—as well as competitors' systems.

**Aftermarket value**—Carrier remanufactured compressors and other aftermarket components provide cost-effective replacement solutions and unmatched, good-as-new performance.

**Custom parts**—Our Performance Parts Group customizes special parts and service programs for fleet modernization and refurbishment.

Lifecycle management—Original Carrier Marine & Offshore Systems equipment gets our customers moving; our parts and service programs keep them moving—cost effectively and with confidence.



### Carlyle Reciprocating & Screw Compressors

- Rugged, dependable service for comfort cooling and refrigeration systems
- Reciprocating and screw designs fit a wide range of applications
- Integral capacity control reduces operating costs and ensures optimal performance
- Design flexibility with semi-hermetic and open-drive models
- Can be repaired on board while the ship is at sea

### Why choose Carrier?

### Service and Support

Carrier Marine & Offshore Systems complements its superior products with a global service footprint. No matter your location, our dedicated marine experts are always close at hand, ready and able to provide turnkey maintenance support for any of your ship's HVAC&R requirements.

### Variable Speed Drives: Retrofits for Chillers, Fans, and Pumps

- Reduce energy consumption and optimize efficiency at part-load conditions with a wide selection of variable speed drives
- Available from 3HP to 5,000HP for chillers, fans, and pumps
- Controlled acceleration reduces electrical and mechanical stress and lowers maintenance costs

### Natural leadership

From the very beginning, Carrier Corporation has been a natural leader. Not simply for the fact that we created an entirely new and innovative product, but because as we did so, we set the standard in environmental responsibility. At a time when sustainability wasn't on most minds, Carrier led the way. It was only natural.

Over time, Carrier helped pioneer a new industry, and then pioneered environmentally sensitive products while reducing our own impact on the environment. We recognize the responsible balance between the technology we provide today and the world we live in tomorrow.

### Willis Carrier: A Sustaining Vision

Over 110 years ago, a humble but determined engineer solved one of mankind's most elusive challenges by controlling the indoor environment.

Today, Willis Carrier's vision and values continue to guide our company. Contact us to learn how we can put them to work to help guide yours.







### Carrier Marine & Offshore Systems Contact Information

#### **Americas**

Carrier Marine & Offshore Systems North America P.O. Box 4805 Carrier Parkway,TR-20 Syracuse, NY 13221-4805 United States of America Phone: 1-315-432-3322

Fax: 1-315-432-3099

### Europe/Middle East/Africa

Carrier Marine & Offshore Systems Europe P.O. Box 10066, Pittsburghstraat 21 3047 BL Rotterdam, The Netherlands Phone: +31-10-238-0181

Fax: +31-10-238-0183

### Asia/Pacific

Carrier Singapore (Pte) Ltd Marine Systems Asia Pacific 28 Teban Gardens Crescent Singapore 608926 Phone: +65-64100-295 Fax: +65-6566-1494

#### China

Carrier Air-Conditioning Sales and Service (Shanghai) Co., Ltd 6/F, Sheng Building, No. 266, Hankou Road, Shanghai 200001, China

Phone: +86 21 2306 3486 Fax: +86 21 2306 3001

# The Future of the World Depends on Our Ability... to Sustain It.

As the world's largest provider of heating, cooling and refrigeration systems, we believe that market leadership requires environmental leadership. Carrier sets industry standards for environmentally sound business practices and a commitment



to sustainability across its products, services and operations. We demonstrate this commitment by creating environmentally responsible solutions that consume less energy and incorporate innovations that improve the world—indoors and out.

### Turn to the Experts

A proven legacy paired with new technology expertise make Carrier Marine & Offshore Systems a total solutions provider for optimizing the efficiency and performance of your entire ship. Our commitment to the marine marketplace is backed by the unmatched knowledge and service capabilities exhibited by our global team of dedicated professionals. Turn to Carrier Marine & Offshore Systems, and turn to the experts.

### 1-800-CARRIER www.carrier.com

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