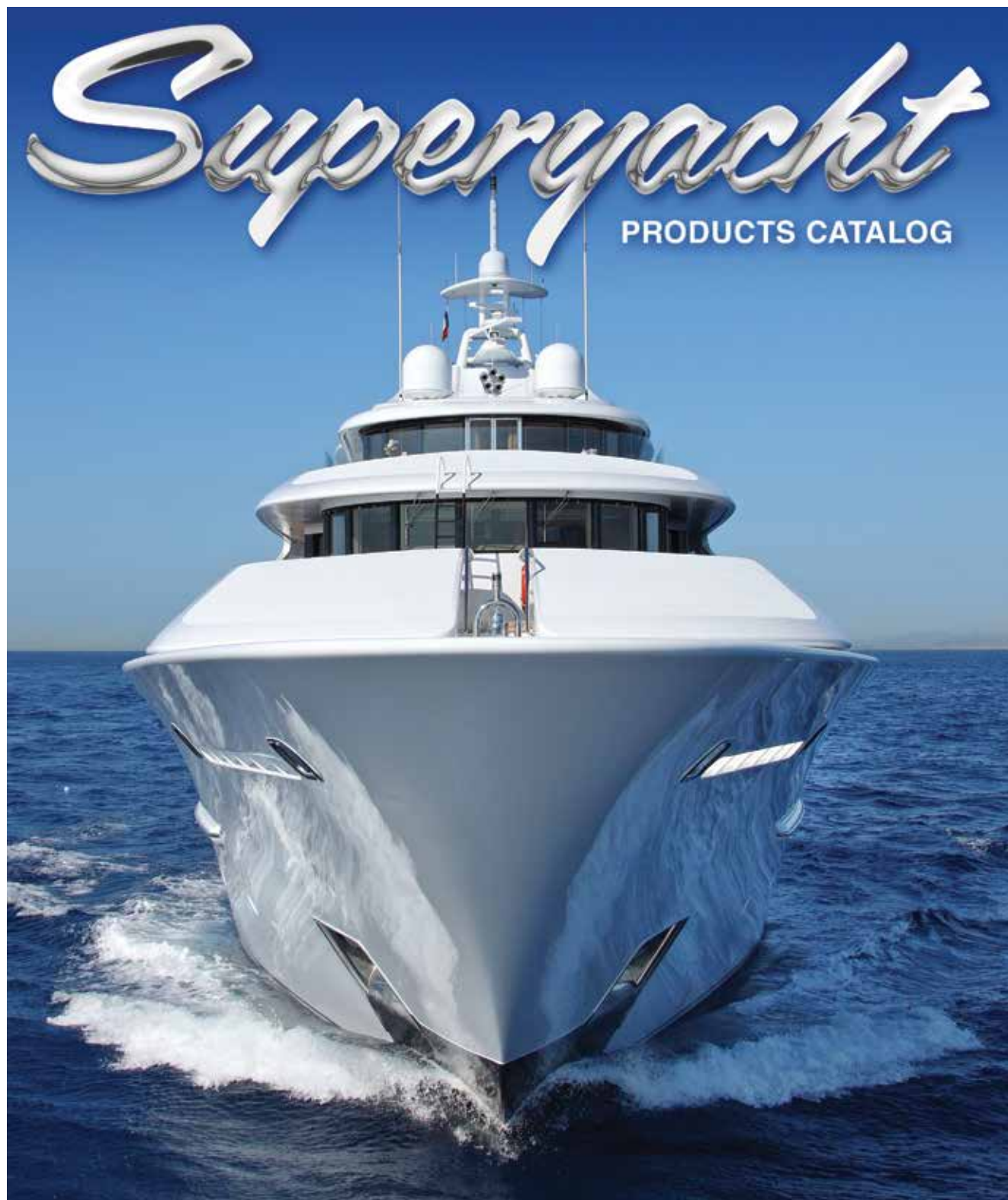


INSPIRED BY COMFORT

 **Dometic**  
MARINE



**HVAC, REFRIGERATORS, SHIP-WIDE VENTILATION, WATER PURIFIERS,  
SANITATION, CONTROLS & ACCESSORIES**

L-2624 Rev. 20131108



**Chilled Water  
Systems**

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**Chilled Water  
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## Environmental Policy

Since 1994, Dometic Marine has provided air conditioning and refrigeration systems with green refrigerants. We lead the industry in the development of globally compliant marine air conditioning systems.

Dometic Marine is committed to minimizing the environmental impact of our products through regular assessment of energy and material demands, emissions, waste generation, and recyclable resources.

For many years we have proudly displayed our “Environmentally Responsible” logo, which indicates our commitment to the environment.



**Breathe Easy  
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**Spot Zero Water  
Purifier System**

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**Sanitation  
Systems**

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# Dometic Marine: Your Single-Source Solution For HVAC, Ship-Wide Ventilation, Refrigeration & Sanitation Systems

With more than 50 years of experience, Dometic Marine is the single source provider of complete air conditioning, engine ventilation, air purification, refrigeration, and sanitation systems. Our products are trusted throughout the world and proven in thousands of installations.

## Custom & Off-the-Shelf Solutions With Just One Call

From HVAC to sanitation, Dometic Marine has a wide range of off-the-shelf products that meet the needs of many vessels. However, if a customized solution is needed, our technical sales engineers will gather your specifications and interact directly with our award-winning engineering team to innovate the right system to satisfy your requirements.

## Global Support For Global Use

A specialist supplier to OEM, refit and repair and aftermarkets, Dometic Marine has an unmatched support network of company-owned offices throughout the world which are served by numerous marine R&D facilities and factories. Factory-authorized distributors, dealers and service engineers in over 100 countries worldwide provide service in the field, giving Dometic Marine the world's largest sales and support network.

## The Three Biggest Challenges When Choosing the Right Manufacturer

Dometic Marine understands the three biggest challenges faced by naval architects and ship owners when choosing the right company for their air conditioning equipment: Support, Selection, and Service.

**Challenge #1: Support** — Trust Dometic Marine's award-winning engineering team to review your drawings and specifications to ensure all measurements and load calculations are correct. Or, we can layout your entire system, size all the appropriate capacities, and design the most suitable system for your vessel. Dometic Marine can also supervise installation and provide on-site training and documentation to your crew.

**Challenge #2: Selection** — Dometic Marine provides the world's broadest range of chilled water systems, including air handlers and controls. Our chillers provide up to 2.88 million BTUs of cooling or heating and come in a variety of configurations, with custom designs available. Our air handlers are available in unique vertical and horizontal configurations that maximize space. Network-capable controls can be incorporated into most ship-automation solutions.

**Challenge #3: Service** — Dometic Marine has the world's largest network of trained and certified sales and service teams to support you no matter where you build or navigate. All products are in accordance with NMA and ASHRAE standards, and our manufacturing facility is ISO 9001:2008 certified.



**Ned Trigg**

Senior Vice President, Global System Sales

"Dometic Marine is globally-renowned for working closely with clients to develop custom systems and collaborating with builders at an early stage to optimize the operational capacity of the units."

## Dometic Marine: A Global Specialist Supplier & Service Provider to OEMs & the Aftermarket

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**Ed Todd**

Director of Sales, The Americas

"Our customers benefit from having a single point of contact, from design and build to service and maintenance."

**Paul Hickenbotham**

Europe, Middle East & Africa

"Our wide range of systems provides exceptional reliability and our global team provides exceptional support."

**Dennis Chiang**

Asia-Pacific

"With a hands-on approach to customer support, Dometic Marine can provide service virtually anywhere in the world."



## Modular Chillers

Proven in thousands of marine installations, Dometic Marine modular chillers range from 16,000 to 396,000 BTU/h. For larger capacities, modular chillers can be staged in custom configurations for up to 2.4 million BTUs (200 tons). Up to six stages are supported.

Dometic Marine modular chillers feature a compact footprint and are available in space-saving low-profile and fully-enclosed designs. Stainless-steel components and other tough, marine-grade materials are used in construction. Condensers are available in standard co-axial coil and shell-and-tube configurations.

### KEY BENEFITS OF A DOMETIC CHILLED WATER SYSTEM

- Refrigerant gas circuit is contained within the chiller
- Allows more focused heat removal in interior spaces
- Reverse-cycle or electric immersion heating
- Scroll or rotary compressors in all standard voltages
- Up to six modules can be staged for large capacities in custom configurations
- Lightweight marine-grade materials
- Air-cooled chillers are available (see page 12)



### TWCV Series Chillers by Cruisair

- High performance and cost effective
- Reverse-cycle heating
- Chilled water flow switch
- Refrigerant high- and low-pressure switches
- Inlet and outlet chilled water temperature sensors
- Blazed plate coil evaporator and coaxial cupronickel seawater condenser for superior performance

24,000 • 30,000 • 36,000 • 48,000 • 60,000 • 72,000

230V/60Hz • 220V/50Hz • 460V/60Hz • 380V/50Hz

R-410A



### MTDV Series Chillers by Cruisair

- Installation flexibility and easy maintenance access
- Flexible hose improves alignment for seawater connections
- Seawater connections reinforced with stainless steel
- Thermal expansion valves optimize performance over a wide range of conditions
- Hot-gas bypass valves maintain heating performance in cold seawater

24,000 • 30,000 • 36,000 • 48,000 • 60,000  
72,000 • 96,000 • 120,000

230V/60Hz • 220V/50Hz • 460V/60Hz • 380V/50Hz

R-410A



### MTC Series Chillers by Cruisair

- Installation flexibility and easy maintenance access
- Reverse cycle heating
- Dual sub-modules allow more convenient water connections or separation for remote mounting
- Removable seawater manifold for condenser cleaning
- Thermal expansion valves optimize performance over a wide range of conditions

24,000 • 30,000 • 36,000 • 48,000 • 60,000  
66,000 • 72,000 • 96,000 • 120,000

230V/60Hz • 220V/50Hz • 460V/60Hz • 380V/50Hz

R-407C



### MTDVSP Chiller by Cruisair

- Engineered to perform in extremely high entering condensing water temperatures of 122°F (50°C)
- Cooled by vessels equipped with keel coolers using a glycol water solution
- Sub-cooler provides adequate cooling of liquid refrigerant entering the thermal expansion valve for optimal performance
- Efficient, compact brazed plate heat exchanger provides enhanced cooling performance in extreme conditions

120,000

230V/60Hz

R-410A



### CHC Series Chillers by Marine Air

- Compact footprint for installation flexibility
- Thermodynamically matched components for best performance
- Few parts ensure better reliability
- Spiral-fluted cupronickel condenser coil provides maximum heat transfer and corrosion resistance
- Electrical box can be mounted on the top or rear of the unit or remotely for installation flexibility

 16,000 • 20,000 • 24,000


 115V/60Hz • 230V/60Hz • 240V/50Hz • 380V/50Hz

 R-407C



### MCGV Low-Profile Series Chillers by Marine Air

- Fits into height-restrictive spaces
- Up to 25% more condenser area than similar units
- Spiral-fluted cupronickel condenser coil provides maximum heat transfer and corrosion resistance
- Removable PVC water headers resist corrosion and erosion
- Hot-gas bypass provides efficient cooling in cold conditions
- Stainless-steel drain pan on 36,000 – 72,000 BTU/h models

 36,000 • 48,000 • 60,000 • 72,000 • 90,000  
120,000 • 150,000 • 180,000


 230V/60Hz • 240V/50Hz • 460V/60Hz • 380V/50Hz

 R-410A



### MCGV Series Chillers by Marine Air

- Compact footprint for installation flexibility
- Aluminum construction is lightweight and resists corrosion
- Bi-flow expansion valves balance heat and cool modes
- Compact stainless-steel brazed plate heat exchangers for maximum efficiency
- Spiral-fluted cupronickel condenser coil provides maximum heat transfer and corrosion resistance

 24,000 • 36,000 • 48,000 • 60,000 • 72,000  
90,000 • 120,000 • 150,000 • 180,000

 230V/60Hz • 240V/50Hz • 460V/60Hz • 380V/50Hz

 R-410A



### MTS Series Chillers by Marine Air

- Marine-grade shell-and-tube condenser
- Hermetically-sealed compressor
- Aluminum chassis and frame
- High-pressure switch and pressure-relief valve for safety
- 100% pump-down capacity for making circuit repairs without recovering the refrigerant
- Dual bottom-draining liquid connections for optimal performance in choppy seas
- Optional electric-immersion heating
- Optional variable frequency drive

 96,000 • 120,000 • 150,000 • 180,000 • 240,000  
300,000 • 396,000

 460V/60Hz • 380V/50Hz

 R-410A



## Controls for Chilled Water

Dometic provides sophisticated, microprocessor-based controls for the precise operation and monitoring of single and multi-stage chilled water systems. Up to six chiller stages are supported.

These controls offer central management of all chiller modules and monitor important information such as water temperatures and diagnostic faults. Ship-wide chiller operation is available via PC interface or over the internet via Modbus/TCP Ethernet protocol.

### KEY BENEFITS OF DOMETIC CHILLED WATER CONTROLS

- Provide central control and monitoring for up to six chiller modules
- Control over all cooling/heating functions including operation of seawater and chilled water pumps, coordination of the compressor(s), and more
- Provides monitoring of inlet/outlet water temperature, compressor run times, diagnostic faults, and more
- Remote control via PC interface, ship-wide Modbus/TCP Ethernet protocol



### Smart Touch Chiller Control

NEW

- Makes chiller management easy
- Intuitive touch-screen operation
- Provides clear indications of current status, operational trends, animated real-time monitoring of the refrigeration circuit and more
- High-resolution display available in three sizes; can be installed in the electrical box or mounted remotely

### Custom Electronics Enclosure

- Custom marine-grade enclosures to store and protect sensitive chiller electronics
- Circuit breakers for compressors and pumps
- Circuit boards are coated for high resistance to damage and corrosion
- Grounded and protected against static interference and RF noise
- Door-mounted keypad/display or Smart Touch high-resolution display



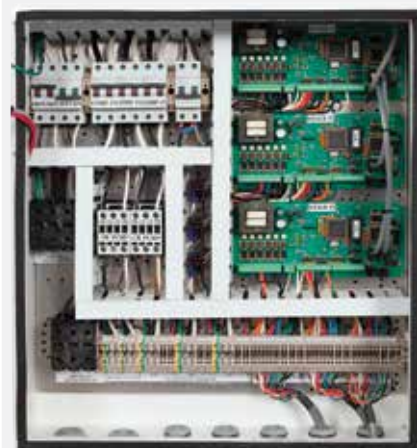
### Tempered Water Logic Control (TWLC)

- Central chiller managements, supports up to six stages
- Displays water temperatures, compressor run times, diagnostic faults, and more
- Records and logs faults and run times



### Chilled Water Master Control (CWMC)

- Central chiller managements, supports up to six stages
- Displays water temperatures, compressor run times, diagnostic faults, and more
- Records and logs faults and run times



## Variable Frequency Drives



A Variable Frequency Drive (VFD) completely eliminates the large starting inrush current of the compressor by ramping up voltage and frequency in a controlled time period. This allows running on limited dockside power, and also protects the generator from overload.

In addition to eliminating inrush, the VFD will also run a 60Hz rated compressor at 60Hz even when input power is 50Hz, which allows full BTU capacity performance (230V only). The drive also protects the compressor by monitoring input voltage and output current, and will shut down if a problem is detected.

### KEY BENEFITS OF VARIABLE FREQUENCY DRIVES

- Eliminates compressor start-up in-rush current
- 208/230V three-phase output with one- or three-phase input
- Full 60Hz capacity even at 50Hz input (230V only)
- Low electronic noise
- CE approved
- 380/460V three-phase models available

## Custom Multi-Stage Chillers

Multi-stage chillers combine two or more chiller modules on a single platform for capacities of up to 2.88 million BTU/h.

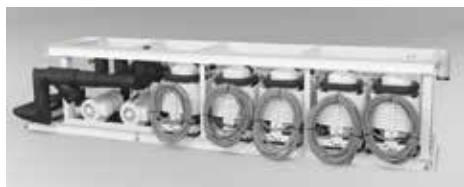
Multi-stage chillers have built-in redundancy, ensuring the system will function even if one of the circuits malfunctions. They feature sophisticated, networkable controls for local or remote monitoring, and

are available on tough, marine-grade aluminum-alloy frames that can be constructed in virtually unlimited configurations.

The systems pictured on these pages are examples of multi-stage chillers built to custom requirements. Please contact us to discuss the system we could design and build for you.



■ MCW 4-Stage 192,000 BTU/h (16 ton)



■ MCW-LP 5-Stage 360,000 BTU/h (30 ton)



■ MTC 2-Stage 120,000 BTU/h (10 ton)



■ MCG 3-Stage 270,000 BTU/h (22.5 ton)



■ MCW 2-Stage 300,000 BTU/h (25 ton)



■ MTC 5-Stage 300,000 BTU/h (25 ton) in Japanese Coast Guard green



■ FMTLC-LP 6-Stage 360,000 BTU/h (30 ton)



■ MCW-LP 6-Stage 360,000 BTU/h (30 ton)



■ STS 3-Stage 432,000 BTU/h (36 ton)



■ STS 3-Stage 432,000 BTU/h (36 ton)





■ MTS 2-Stage 480,000 BTU/h (40 ton)



■ STSV 3-Stage 540,000 BTU/h (45 ton)



■ STS 3-Stage 540,000 BTU/h (45 ton)



■ MCW 3-Stage 540,000 BTU/h (45 ton)



■ STS 4-Stage 576,000 BTU/h (48 ton)



■ MTSV-LP 4-Stage 720,000 BTU/h (60 ton)



■ SCW 4-Stage 720,000 BTU/h (60 ton)



■ MCW-LP 5-Stage 900,000 BTU/h (75 ton)



■ MTSV 3-Stage 1,080,000 BTU/h (90 ton)



## Chilled Water Air Handlers

Dometic Marine air handlers are available in a wide range of BTU capacities and space-saving configurations.

Air handlers have high-efficiency, high-velocity (HV) blowers. Upgrade to brushless WhisperCool (DC) blowers, which are extremely quiet but powerful enough to overcome high-static-pressure duct.

Dometic Marine air handlers work with all Cruisair and Marine Air chillers.

### KEY BENEFITS OF DOMETIC CHILLED WATER AIR HANDLERS

- Configurations to fit any installation space
- Exceptional dehumidification
- Vibration-isolation mounting
- Optional flow control automatically balances circulated water throughout system
- Optional electric heat
- Optional integrated Breathe Easy™ air purification (Gold series only)



AU-HV model shown

### Gold Series Air Handlers

- Rust-free composite drain pan with positive flow drain channels
- Single adjustment screw allows up to 270° blower rotation; can be rotated straight down for overhead applications
- Reinforced drain holes and vibration-isolation mounts
- Optional integrated Breathe Easy™ air purification
- High-velocity blowers (AU-HV models)
- Brushless WhisperCool blowers (AU-DC models) are ultra quiet yet strong enough to overcome high static pressure duct

6,000 • 9,000 • 12,000 • 18,000 • 24,000

115V/60Hz • 208-230V/60 or 50Hz



NEW



AT-DC model shown

### AT Air Handlers

- Compact design
- Improved cooling and dehumidification
- Drain pan has anti-slosh, anti-fungal lining
- Exposed sheet metal insulated against secondary insulation
- High-velocity blowers (AT-HV models)
- Brushless WhisperCool blowers (AT-DC models) are ultra quiet yet strong enough to overcome high static pressure duct

4,000 (AT-HV only) • 36,000

115V/60Hz • 208-230V/60 or 50Hz



ATL-DC model shown

### ATL Low-Profile Air Handlers

- Suspend from above or support from beneath
- Bypass valve has removable power head for simple servicing
- Horizontally mounted blowers for exceptional low profile
- Vibration-isolation suspension mounting hardware included
- High-velocity blowers (ATL-HV models)
- Brushless WhisperCool blowers (ATL-DC models) are ultra quiet yet strong enough to overcome high static pressure duct

6,000 • 9,000 • 12,000 • 18,000 • 24,000

115V/60Hz • 208-230V/60 or 50Hz



ABL-HV model shown

### ABL Low-Profile Air Handlers

- Suspend from above or support from beneath
- Bypass valve has removable power head for simple servicing
- Blowers mounted at 90° angle to the coil for minimal depth
- High-velocity blowers (ABL-HV models)
- Brushless WhisperCool blowers (ABL-DC models) are ultra quiet yet strong enough to overcome high static pressure duct

18,000 • 24,000

208-230V/60 or 50Hz





ATV-HV model shown

### ATV Slim-Profile Air Handlers

- Unique vertical design results in dramatically reduced depth
- Fits into walls and other tight spaces
- Exposed are components insulated against secondary insulation
- Reduced height models available
- High-velocity blowers (ATV-HV models)
- Brushless WhisperCool blowers (ATV-DC models) are ultra quiet yet strong enough to overcome high static pressure duct

6,000 • 9,000 • 12,000 • 18,000 • 24,000

115V/60Hz • 208-230V/60 or 50Hz



AU-HV-4P model shown

### ATV "4-Pipe" Slim-Profile Air Handlers

- Separate heating provided by an auxiliary heat source such as a hydronic boiler (see page 16)
- Unique vertical design results in dramatically reduced depth
- Fits into walls and other tight spaces
- Exposed are components insulated against secondary insulation
- Reduced height models available
- High-velocity blowers (ATV-HV-4P models)

6,000 • 9,000 • 12,000 • 18,000 • 24,000

115V/60Hz • 208-230V/60 or 50Hz

## Cabin Controls for Air Handlers

Dometic Marine provides microprocessor-based, easy-to-use cabin controls for the precise monitoring and control of the temperature and humidity levels of interior spaces. Our digital cabin controls work with all chilled water air handlers.

The optional CAN Bus adapter allows control over multiple air handlers via the ship-wide network.

### KEY BENEFITS OF DOMETIC MICROPROCESSOR CABIN CONTROLS

- Automatic humidity control
- Cool-only, heat-only, and automatic modes plus multiple fan-speed control
- Displays ambient and set-point temperature in Fahrenheit or Celsius
- Internal circuitry is resistant to corrosion
- Optional CAN Bus adapter puts multiple cabin control on the vessel's network



### Smart Touch Cabin Control

- Highly customizable displays enable personal preferences
- Intuitive icons and menus for easy use
- Interactive screen leads you through start-up and troubleshooting
- Programmable scheduler
- Built-in help for certain features
- Faults and service alerts display on screen
- CAN Bus compatible
- Works with Cruisair Q-Logic and Marine Air Passport I/O

NEW



Q3 keypad/display

### Q-Logic Control by Cruisair

- Easier menu-based programming
- Smarter error/fault codes
- Timed setting for air filter replacement
- Automatic dehumidification
- Easier maintenance with separate off-board compressor triac
- Optional outside temperature sensor
- Optional CAN bus adapter



Qht keypad/display



Passport Compact keypad/display

### Passport I/O Control by Marine Air

- Automatic humidity control reduces moisture when the boat is unattended
- Cycle fan with compressor or continuous operation
- Cycle pump with compressor or continuous operation
- Automatic or manual fan-speed selection
- Built-in air sensor
- Compressor fail-safe operation
- Optional CAN bus adapter (Elite only)



Elite keypad/display

## Condaria Chilled Water Systems

With more than 30 years in the marine industry, Condaria specializes in chilled water air conditioning systems for leisure yachts and custom boats with a focus on compact, high-quality systems that are quiet and easy to use.

Condaria's location in Milan, Italy, is convenient to shipping and easily linked to most shipyards in Italy and throughout Europe. Condaria's manufacturing facilities are modern and well equipped, and proven production planning methods ensure on-time deliveries.

### KEY BENEFITS OF CONDARIA CHILLED WATER SYSTEMS


- Rugged, marine-grade materials
- Hermetically-sealed or accessible-hermetic compressors
- Units built on sturdy frames and chassis
- Shell-and-tube condensers (WM-S/FCL units) can be opened for easy cleaning and servicing
- Frequency inverters control compressor starting current peak and regulate running frequency/speed



PCWM/FCL with two compressors shown

### PCWM/FCL Series Chillers

- Modular configuration, available in one to four compressor stages
- Reverse-cycle heating
- Constructed with rugged, marine-grade materials such as stainless steel and cupronickel
- Reduced noise and vibration
- Advanced controls monitor and coordinate all system functions

 48,000 - 324,000 BTU/hr



1,440,000 BTU/hr WM-S/FCL model shown

### WM-S/FCL Custom-Built Chillers

- Modular configuration, available in one to four compressor stages
- Reverse-cycle heating
- Constructed with rugged, marine-grade materials such as stainless steel and cupronickel
- Reduced noise and vibration
- Advanced controls monitor and coordinate all system functions
- Each compressor driven by a frequency inverter to control current peak when starting and frequency/speed while running

 30,000 - 2,000,000 BTU/hr

For vessels with very high capacity HVAC requirements, Dometic Marine's Condaria brand designs and builds chilled water systems with capacities up to 2.88 million BTU/h. These chillers typically have shell-and-tube heat exchangers and accessible semi-hermetic compressors which can be opened for maintenance to ensure peak performance throughout the life of the system.

Each compressor is driven by a frequency inverter which controls the starting electrical current peak and the frequency/speed range while running. The custom-made chillers pictured below are examples of these high-capacity systems.



■ (PC)WM-S/FCL 240004 960,000 BTU/h (80 ton)



■ WM-S/FCL 240004 4-Stage 960,000 BTU/h (80 ton)



■ WM-S/FCL 360004 4-Stage 1,440,000 BTU/h (120 ton)



## Condaria Air Handlers

Condaria air handlers can be connected to a manual selector or a three- or ten-speed digital control (see controls below), and feature a multi-row copper/aluminum heat exchangers for complete moisture removal.

Operation is handled by stopping/starting the blower or via three-way water valve with by-pass. Unique, customizable fresh air makeup air handlers (AHU series) are available to enhance and refresh the quality of the onboard environment.

### KEY BENEFITS OF CONDARIA AIR HANDLERS

- Wide range of BTU capacities and configurations
- High-pressure centrifugal blowers are extremely quiet
- ABS drain pans (ALU and AP series)
- Drain pans are sloped for rapid removal of condensate
- Four to five row coils ensure complete moisture removal



ALU Giant model shown

### ALU Series Air Handlers

- Low-profile
- Heavy-gauge peraluman construction
- ABS drain pans
- High-pressure centrifugal blowers
- Can be installed horizontal or vertically on site


 2,464 - 14,800 BTU/hr



ALU Giant model shown

### AP Series Air Handlers

- Compact and robust design
- ABS drain pans
- Rotatable, high-pressure centrifugal blowers
- Four- to five-row coil ensures complete moisture removal
- Electric heat is optional


 3,400 - 24,000 BTU/hr



ALU Giant model shown

### AHU Fresh Air Makeup Units

- Unique, dedicated units keep air in lower decks fresh
- Introduce fresh air into cabins
- Remove moisture, salt, odors, and airborne particles that could in time erode the quality and integrity of the on-board environment

 33,730 - 91,271 BTU/hr

## Condaria Top Climate MBS 6



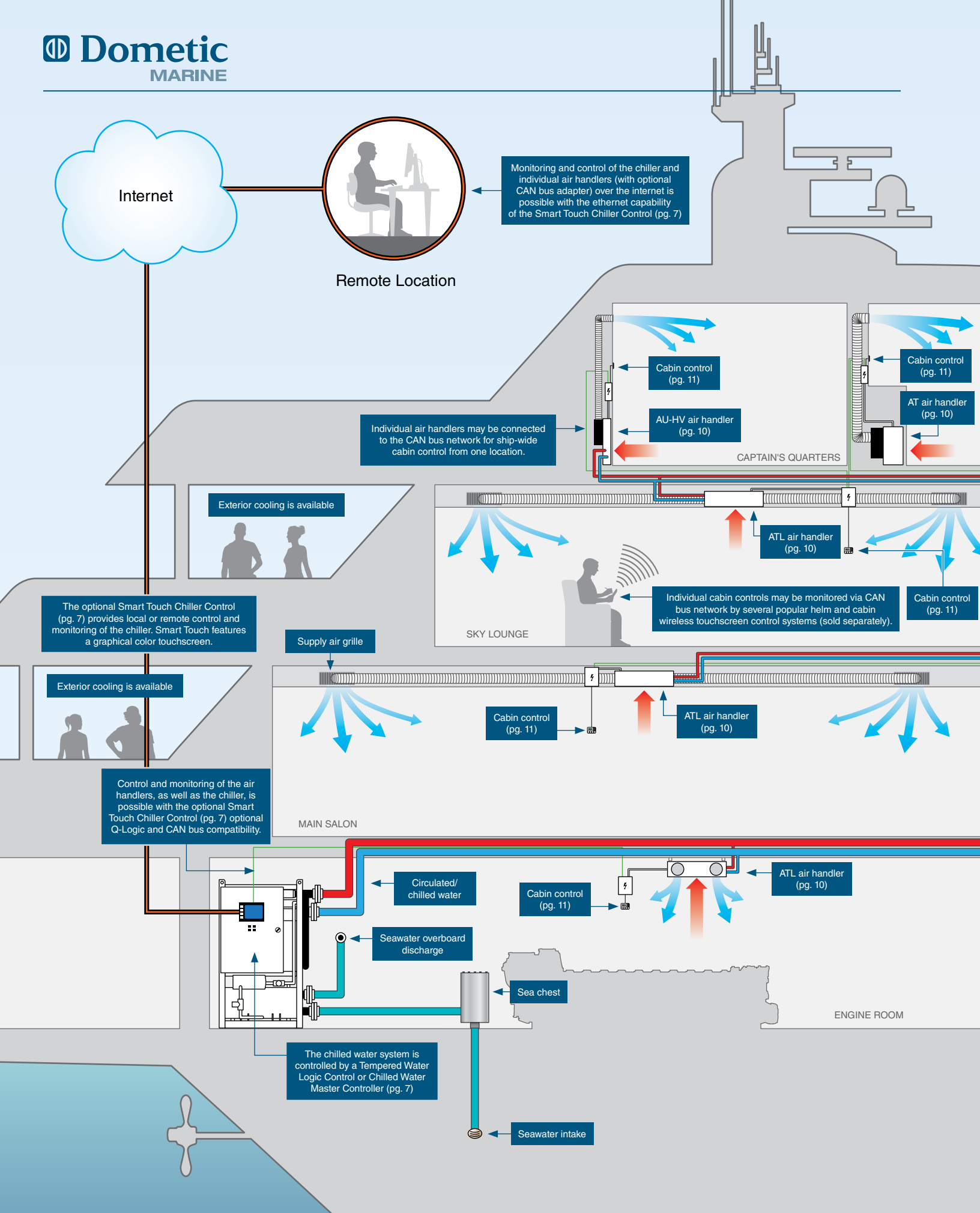
Available in a three-speed and 10-speed version, the popular Top Climate control features a wide range of displays that fit most decorative bezels.

Operation is simple and intuitive, and specially designed electronics

produce virtually silent fan speeds. The built-in Mod Bus interface puts the Top Climate on most ship automation networks.

### KEY BENEFITS OF TOP CLIMATE

- Extremely compact
- Wide variety of displays to fit most surround bezels (sold separately) that complement the ship's interior decor
- Brightness of the LED varies with ambient light
- Intuitive and user-friendly operation
- 3-speed and 10-speed fan versions
- Built-in Mod Bus interface port puts air handler control on most automation networks



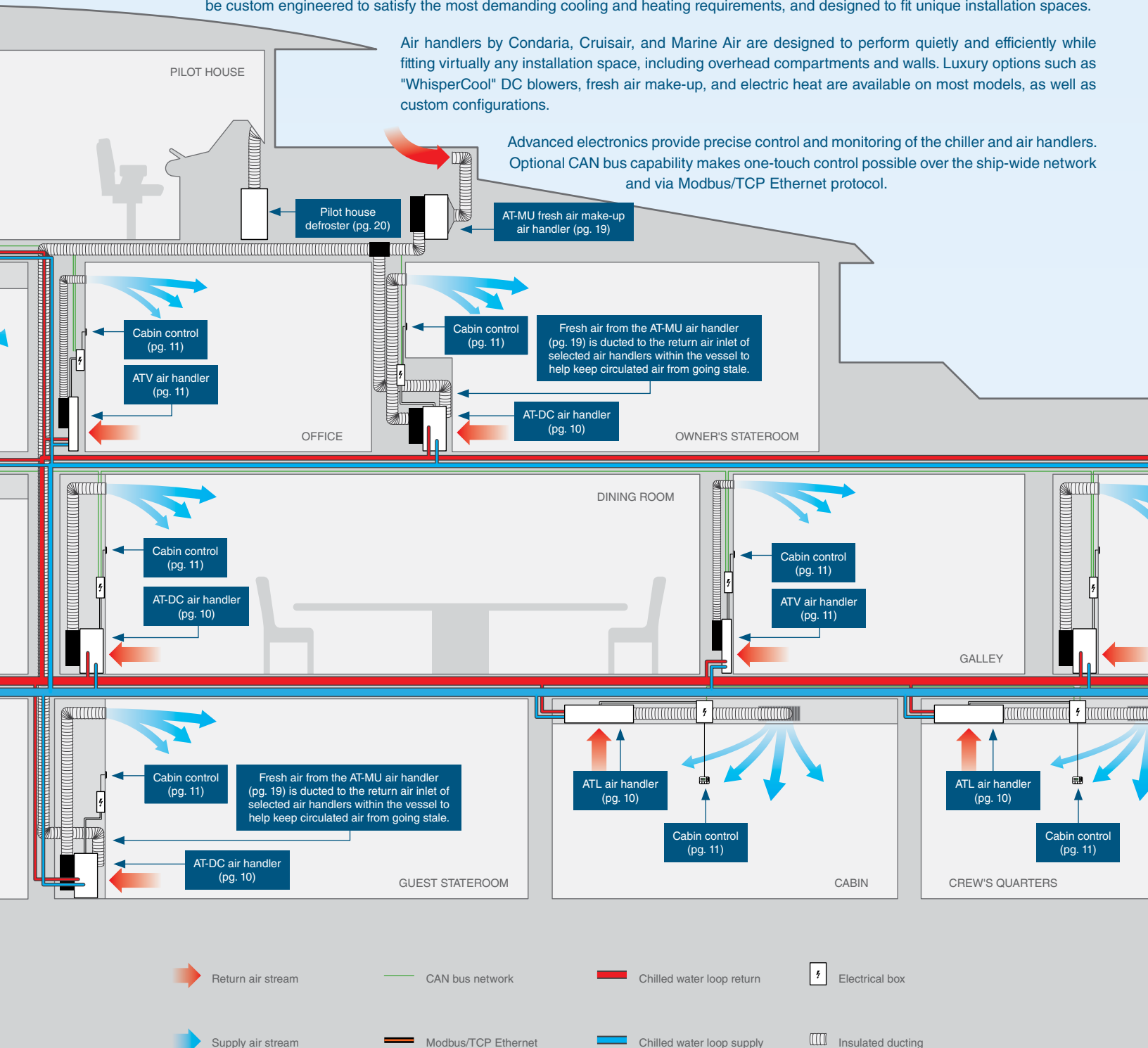
## A Complete Chilled Water Air Conditioning System From One Source

From sophisticated electronic controls to hand-made air grilles with custom wood finishes, Dometic Marine can design and build a complete chilled water air conditioning system for your superyacht. Our engineering team is available to review the plans for your vessel, calculate all load requirements, and design the system best suited to your needs.

At the heart of a chilled water air conditioning system is the chiller itself. All Dometic Marine chillers — manufactured by Condaria, Cruisair, or Marine Air — are expertly constructed with components and marine-grade materials of the highest possible quality. Multi-stage chillers for high capacities can be custom engineered to satisfy the most demanding cooling and heating requirements, and designed to fit unique installation spaces.

Air handlers by Condaria, Cruisair, and Marine Air are designed to perform quietly and efficiently while fitting virtually any installation space, including overhead compartments and walls. Luxury options such as "WhisperCool" DC blowers, fresh air make-up, and electric heat are available on most models, as well as custom configurations.

Advanced electronics provide precise control and monitoring of the chiller and air handlers. Optional CAN bus capability makes one-touch control possible over the ship-wide network and via Modbus/TCP Ethernet protocol.





## Split-Gas Air Conditioning

Dometic Marine's water-cooled split-gas air conditioning systems are the most durable and energy-efficient available for marine use.

Emerald series R-410A condensers are engineered for flexible installation and easy maintenance access and work efficiently with compact and lightweight Emerald TurboVap evaporating units. We also provide evaporating units that work with R-417A condensers.


### KEY BENEFITS OF DOMETIC SPLIT-GAS AIR CONDITIONING

- Compact and extremely energy-efficient
- Central condensing unit reduces plumbing for easier installation
- Quiet evaporating units with vibration-isolation mounting available
- "Positive-flow" anti-slosh condensate drain pans
- Rust-free, composite molded drain pans (Emerald and TurboVap series only)



### Emerald Series Condensers

- Rust-free composite drain pan
- Up to 85% less standing water in the drain pan
- Square chassis for easy installation in tight spaces
- Reversing valve, pressure switches and service ports centrally located for easy maintenance access
- Built-in refrigerant line filter drier reduces installation time
- Chassis allows optimal drain connections
- Vibration-isolation mounting hardware

 6,000 • 8,000 • 10,000 • 12,000 • 16,000 • 24,000  
30,000 • 36,000 • 48,000 • 60,000 • 72,000

 115V/60Hz • 230V/60Hz • 240V/50Hz • 460V/60Hz • 380V/50Hz

 R-410A



### Emerald TurboVap Series Evaporating Units

- Up to 28% reduced amperage
- Up to 85% less standing water in the drain pan
- Up to 14% increase in cooling capacity
- Up to 15% lighter and up to 17% reduced height
- Up to 19% increased air flow CFM
- Rust-free composite drain pan
- Work with R-410A and R-417A condensers

 4,000 • 6,000 • 8,000 • 10,000 • 12,000 • 16,000

 115V/60Hz • 208-230V/60 or 50Hz

 R-410A (TVE models) • R-417A (TV models)



### EBE Series Evaporating Units

- Compact design
- High-velocity, full-insulated rotatable blowers
- Drain pan has anti-slosh, anti-fungal lining
- Larger blower inlet for increased air flow across the coil
- Thermal expansion valve for optimal performance over a wide range of conditions
- Optional electric heat (EBHE models)

 8,000 • 10,000 • 12,000 • 16,000 • 24,000 • 30,000 • 36,000

 115V/60Hz • 208-230V/60 or 50Hz

 R-410A



### EBDE Series High-Capacity Evaporating Units

- Variable-speed blower
- Horizontal or vertical air discharge (field rotatable)
- Integrated condensate drain pan with anti-slosh, anti-fungal foam lining
- Easy-to-replace air filter
- Integrated chassis with vibration-isolation mounts
- Works with Emerald condensers

 30,000 • 36,000 • 48,000 • 60,000 • 72,000

 230V/60Hz • 220V/50Hz

 R-410A



EBLEP model shown with return-air plenum

## EBLE Series Low-Profile Evaporating Units

- Dual variable-speed, high-efficiency PSC blowers
- Drain pan has anti-slosh, anti-fungal lining
- Optional return-air plenum for overhead installations (EBLEP models)
- Thermal expansion valve for optimal performance over a wide range of conditions
- Minimal depth
- Blower stabilizing brackets with vibration-isolation hardware
- Exposed components are insulated against secondary insulation
- Optional electric heat

 12,000 • 16,000 • 24,000 • 30,000 • 36,000

 115V/60Hz • 208-230V/60 or 50Hz

 R-410A

## Self-Contained Air Conditioning

Self-contained direct expansion air conditioning systems by Dometic Marine are engineered for the cooling or heating of small or confined interior spaces, or as auxiliary units to cool an engine room, electronics storage, or exterior deck area.

The compact size of self-contained systems make them ideal for installation under a bunk or bench or in a locker or closet, yet are powerful enough to be ducted to two or more areas.

### KEY BENEFITS OF DOMETIC SELF-CONTAINED AIR CONDITIONING

- Ideal for smaller or confined interior areas, or for cooling engine room, electronics storage, or exterior deck area
- All major components mounted on a single chassis
- Small footprint and compact size is ideal for installation under a bunk or bench, or in a locker or closet
- Vibration-isolation mounting hardware reduces noise and vibration



## Vector Turbo Series Air Conditioning

- Up to 27% more energy efficient
- Up to 21% increased capacity
- Up to 85% less standing water in the drain pan
- Rust-free composite drain pan
- Vibration-isolation mounting hardware
- Optional sound cover reduces compressor noise up to 50%

 6,000 • 8,000 • 10,000 • 12,000 • 16,000

 115V/60Hz • 230V/60Hz • 240V/50Hz

 R-410A



## Dash Air Low-Profile Air Conditioning

- Only 8 in. (203 mm) high thanks to unique horizontal compressor
- High-efficiency ductable dual tangential blowers
- Ideal for flybridge, cockpit and on-deck installations
- Stainless-steel 304 drain pan
- Oversize four-row evaporator for excellent heat removal

 16,000

 115V/60Hz • 230V/60Hz • 240V/50Hz

 R-410A



## Vector Compact Series Air Conditioning

- High-capacities in a compact self-contained package
- High-velocity insulated blowers are rotatable
- Condenser coil's cupronickel-encased copper condenser coil provides maximum heat transfer and corrosion resistance
- Dual-blower 30,000 BTU/hr model available
- Evaporator coil with enhanced fin design and rifled copper tubing to provide maximum capacity
- Optional stainless-steel drain pan (SVCD models)

 18,000 • 27,000 • 30,000

 115V/60Hz • 230V/60Hz • 240V/50Hz

 R-410A

## Cabin Controls For DX Systems

For the precise monitoring and control of the temperature and humidity levels of interior spaces, our digital cabin controls work with Cruisair and Marine Air direct expansion evaporating units and self-contained air conditioners.

The optional CAN Bus adapter allows control over multiple evaporators or self-contained air conditioners via the ship-wide network.

### KEY BENEFITS OF DOMETIC MICROPROCESSOR CABIN CONTROLS

- Automatic humidity control
- Cool-only, heat-only, and automatic modes plus multiple fan-speed control
- Displays ambient and set-point temperature in Fahrenheit or Celsius
- Internal circuitry is resistant to corrosion
- Optional CAN Bus adapter puts multiple cabin control on the vessel's network



### Smart Touch Cabin Control

- Highly customizable displays enable personal preferences
- Intuitive icons and menus for easy use
- Interactive screen leads you through start-up and troubleshooting
- Programmable scheduler
- Built-in help for certain features
- Faults and service alerts display on screen
- CAN Bus compatible
- Works with Cruisair Q-Logic and Marine Air Passport I/O

NEW



Q3 keypad/display



Q4t keypad/display

### Q-Logic Control by Cruisair

- Easier menu-based programming
- Smarter error/fault codes
- Timed setting for air filter replacement
- Automatic dehumidification
- Easier maintenance with separate off-board compressor triac
- Optional outside temperature sensor
- Optional CAN bus adapter



Passport Compact keypad/display



Elite keypad/display

### Passport I/O Control by Marine Air

- Automatic humidity control reduces moisture when the boat is unattended
- Cycle fan with compressor or continuous operation
- Cycle pump with compressor or continuous operation
- Automatic or manual fan-speed selection
- Built-in air sensor
- Compressor fail-safe operation
- Optional CAN bus adapter (Elite only)

## Breathe Easy® In-Duct Air Purifiers

Dometic's award-winning Breathe Easy™ in-duct air purifier uses innovative photocatalytic nano-mesh technology and non-ozone-producing ultraviolet (UV) light to stop on-board odors.

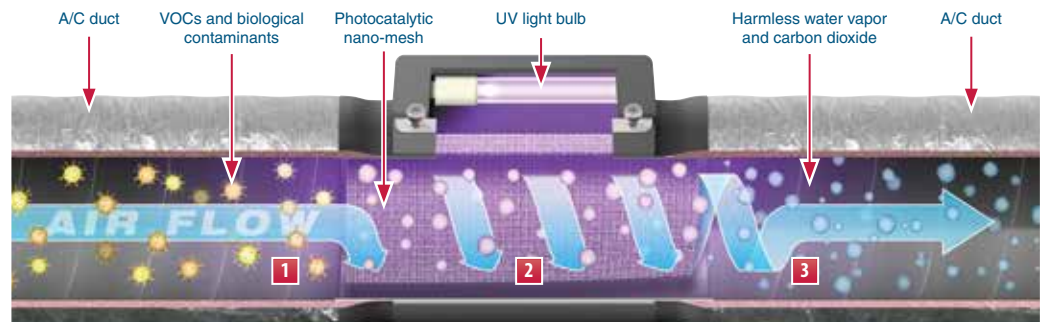
The In-duct air purifier works silently and safely within the A/C duct and does not significantly decrease air flow velocity.

### KEY BENEFITS OF BREATHE EASY IN-DUCT AIR PURIFIERS

- Eliminate unpleasant on-board odors
- Uses an intense ultraviolet light that produces no harmful ozone
- Up to 98% reduction in volatile organic compounds (in-duct models)
- Up to 99.9% reduction in biological contaminants (in-duct models)



In-duct air purifier installed under a berth within the A/C duct



### How Breathe Easy Works:

- 1 Chemical and biological impurities enter the in-duct air purifier through the A/C duct.
- 2 UV light activates the photocatalytic nano-mesh, reconfiguring impurities into non-toxic elements. Vortex action maximizes contact with the nano-mesh structure.
- 3 Harmless water vapor and carbon dioxide exit the air purifier

Watch Breathe Easy Videos:  
[www.dometic.com/idbeap](http://www.dometic.com/idbeap)





## Special Applications

Many workboats have unique needs requiring specialized equipment. Trust Dometic Marine to engineer the right solution.

This can be seen in products such as the Radome ECU, which cools the critical components inside the radar domes, or fresh-air make-up air handlers which help prevent the air below decks from going stale.

Auxiliary electric heat warms cabins in cold climates, and multi-duct defrosters maintain visibility in the helm for safe maneuvering.

### KEY BENEFITS OF DOMETIC SPECIAL APPLICATIONS PRODUCTS

- #1 engineering team provides unique solutions for unique requirements
- Specialized cooling and heating equipment for almost any marine environment
- Rugged equipment to maintain ideal temperatures for sensitive electronics
- Electric or diesel-powered auxiliary heating
- Quiet and efficient defrosters



Interior self-contained model shown



Remote ducted self-contained model shown

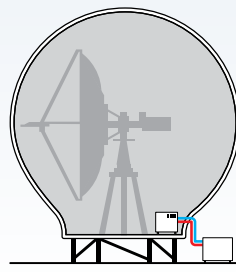
### Radome Environmental Control Unit

- Keeps sensitive domed electronics cool
- Air cooled – no plumbing required
- Durable corrosion-resistant coating on interior components
- Raised lance fin and rifled tubing for maximum capacity
- Solid-state digital control provides reliable temperature and humidity control

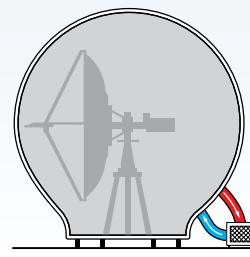
16,000

115V/60Hz • 230V/60 • 240V/50Hz

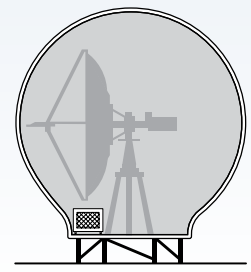
R-417A



Split-Gas



Remote Ducted Self-Contained



Interior Self-Contained



### Vectronic Air Conditioning System

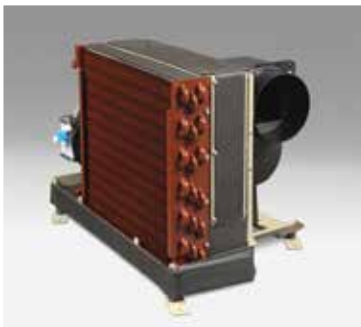
- Prevents critical electronics or machinery from overheating
- Specifically adapted to cool electronics and other equipment in harsh workboat environments
- Powerful, compact and quiet self-contained system
- Seawater cooled
- Stainless-steel drain pan has three drain locations for rapid removal of condensate water
- Rotatable blower
- Unit-mounted digital control provides precise operation

18,000

230V/60Hz • 240V/50Hz

R-410A

NEW



### Fresh-Air Make-Up Air Handlers

- Keeps air inside the vessel from going stale
- Corrosion-resistant coating on evaporator coil, blower and drain pan
- Drain pan has anti-slosh, anti-fungal foam lining
- High-velocity (HV) blower; ultra-quiet WhisperCool blowers available
- Electric heat with two-stage overload
- Heater assembly accessible from the top or side

18,000 • 24,000 • 36,000

115V/60Hz • 230V/60Hz • 240V/50Hz



### Auxiliary Ductable Heater

- Provides ductable heating in cold seawater conditions
- Up to 4 kW of electric heat
- Fin tube heating elements
- Two-stage thermal protection
- High-temperature thermal protection

 115V/60 or 50Hz • 230V/60 or 50Hz

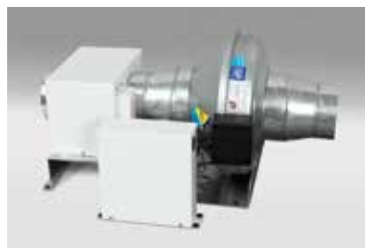


### Pilot-House Defroster

- Individual ducts for each pane of glass
- Custom configurations for up to six duct ring outlets
- May be mounted horizontally, vertically, flat or on edge
- Fan-with heat or fan-only modes
- Lightweight marine-grade aluminum construction
- Tapered duct housing permits easy duct connections
- Slim design fits easily in overhead spaces or under pilot-house coaming area
- Quiet and efficient squirrel cage fan for long service life

 5,120 (Heat)

 230V/60



### In-Line Duct Defroster

- 1 kW of heat
- External controls
- Typically used with chilled water systems
- Large blower provides the needed back pressure to push hot air through the small grilles directed at the glass

 115V/60 or 50Hz



### Hydronic Diesel Boiler

- Quiet, fuel-efficient heater
- Works with chilled water air handlers
- 3.0 or 3.5 kW of heating
- Supplies water at temperature of 120°F/45°C
- Ideal for use when reverse-cycle heating is unavailable
- Fuel-efficient alternative for vessels operating in northern extremes where heating is needed for extended periods
- Easily retrofittable
- Maintains comfortable on-board temperatures at night when the primary generator may be shut down



### SmartStart™ Soft Starter for Single-Phase Compressors

- Smooths out inrush of compressor starting current
- Reduces strain on the power source
- Reduces brown-out effects at compressor start-up
- May enable an inverter to power the air conditioner
- May eliminate the need to upgrade the generator
- Inexpensive, small, and lightweight

 Input: 115V/60 or 50Hz • 208-240V/60 or 50Hz



## Refrigerators

Dometic built-in and portable refrigerators are designed to withstand the rigors of marine use.

Award-winning CR series refrigerators with full-width freezer compartments have a refrigeration capacity of up to 4.8 cu. ft. (136 liters). Portable CF coolers can operate as a refrigerator or freezer. The CF-850 offers 29.3 cu. ft. (830 liters) of refrigeration space and an 8-hour battery for the reliable transportation of provisions.

### KEY BENEFITS OF DOMETIC REFRIGERATORS

- Built-in and portable refrigerators
- 12/24V DC or 110/220V AC operation
- Fully hermetic compressors
- Award-winning design (CR series)
- Rugged and reliable construction



Stainless-steel CR refrigerators

### CR Series Built-In Refrigerators With Full-Width Freezers

- Exclusive protected evaporator eliminates risk of ice-pick damage
- Full-width freezer compartment
- New stainless-steel models with one-piece wrapped door
- New drawer-opening models available
- Recessed handle provides smooth, sleek finish
- Double-lock door stays closed in rough seas (not included on stainless-steel models)
- Vent feature holds door open slightly for easy defrosting



5 sizes from 1.7 to 4.8 cu. ft. (48.1 to 136 liters)



12/24V DC • 100-240V AC

NEW



CF series soft-touch control panel with digital temperature display

### CF Series Portable Refrigerators/Freezers

- AC/DC or DC-only models
- Can operate as a refrigerator or freezer
- Convenient carry handles
- Soft-touch control panel with digital temperature display
- Quick-chill function runs compressor at maximum until the desired temperature is reached



7 sizes from 0.7 to 3.8 cu. ft. (20 to 108 liters)



0° to 50°F (-18° to 10°C)



12/24V DC • 100-240V AC



### CF-850 Portable Provisioning Refrigerator

- Gross capacity of 850 liters (29.3 cu. ft.)
- 8-hour battery; optional second battery for up to 16 hours
- Ideal for the transport of food, medical supplies, and other temperature-sensitive products
- Easy installation and removal without the need for tools
- Belt set (included) enables quick and safe anchoring
- High-density polyethylene cabinet resists external damage
- Safety features include an optical temperature alarm system, double-magnet door seal, and door lock that can be opened from the inside



29.3 cu. ft. (830 liters)



32° to 54°F (0° to 12°C)



12V DC • 220-240V AC



Integrated control with digital temperature readout and accurate set-point adjustment



## Dometic Ship-Wide Ventilation Systems

Ship-wide ventilation systems by Dometic-Livos Technologies protect and cool marine machinery spaces with a complete line of smoke and fire dampers, mist-eliminating grilles, commercial-grade fans and blowers, and digital and manual controls.

All materials used in construction are marine grade and built to withstand harsh marine environments. Dometic-Livos Technologies specializes in custom components and integrated systems.

### KEY BENEFITS OF DOMETIC SHIP-WIDE VENTILATION SYSTEMS

- Commercial-grade fans and blowers provide cooling and/or combustion air
- Fan blades constructed of high-strength PPG glass-reinforced polyamide
- Mist-eliminating grilles stop salt mist and water from entering the engine room
- Smoke and fire dampers available in marine-grade aluminum or stainless steel
- Control systems available for 3-phase and 24V DC fans and blowers



### Pressure & Temperature Monitoring Fan Controls

- Available for 3-phase and 24V DC fans and blowers
- Controls can be manual variable speed, temperature controlled, pressure controlled, or pressure and temperature controlled
- DC controls are temperature based
- 3-phase systems can have fire damper control
- Optional central monitoring interface



Custom-made fan control enclosure with VFDs

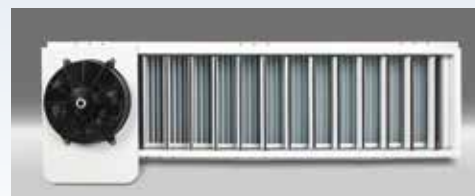
NEW



A-60 rated fire damper with electric actuator

### Smoke & Fire Dampers

- Close off the engine space in a fire event
- Lack of fresh air in conjunction with the release of fire retardant can snuff out a fire
- Available in marine-grade aluminum or stainless steel
- Available with electric actuators as well as pneumatic (fire system) release spring closures



Custom integrated mist eliminator and damper with DC fan

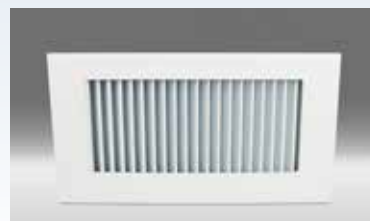
NEW



Custom two-stage mist eliminating grille

### Mist-Eliminating Grilles

- Stop corrosive salt mist and water from entering the engine room
- Each mist eliminator is custom designed for maximum air flow and minimum restriction
- Four drainage options: Bottom, face, horizontal, and sump



Bottom-draining mist-eliminating grille

NEW



3-phase axial fan (12 to 48 in. diameter range)

### Commercial-Grade Fans & Blowers

- Provide cooling and/or combustion air for marine machinery spaces
- Corrosion-resistant, lightweight materials
- Blades constructed of high-strength PPG glass reinforced polyamide
- AC fans have powder coated housing
- Fan motors are high-efficiency, direct drive, and reversible
- Marine-grade aluminum or 315 stainless-steel hardware



DC and AC powered fans

NEW

## Spot Zero Water Purifier System

The Dometic Spot Zero fresh-water reverse-osmosis system removes 95-99% of total dissolved solids (TDS) from any dock or on-board water supply. The result is soft, pure water that lets water-sprayed surfaces dry clean without leaving spots that have to be wiped away. Spot Zero water can also be used for bathing, cooking, drinking, and crystal-clear ice.

The Dometic Spot Zero system has a 130 GPH capacity system. It comes in a portable bench-size dock box or can be installed on board.

### KEY BENEFITS OF A SPOT ZERO WATER PURIFIER SYSTEM

- Eliminates water spots
- Removes 95-99% of total dissolved solids
- Removes viruses, cysts, and bacteria
- Stop wasting time drying by hand
- Use dockside or install on board
- Very low power consumption, very low noise and vibration



Water spots visible on chrome hand rail after rinse and air dry with regular dock water



No water spots on chrome hand rail after rinse and air dry with Spot Zero purified water



Fill the vessel's fresh-water holding tank with Spot Zero water to be used in cooking...



...and bathing.



130 GPH Spot Zero Dock Box shown

### Spot Zero Dock Box

- All components contained inside bench-size dock box
- 130 GPH (492 LPH) capacity
- Hydraulic lid
- Draws 8 amps at 115V, 4 amps at 230V
- Optional carry handles for lifting
- Optional wheels for easy transportability
- Use dockside or lift on board

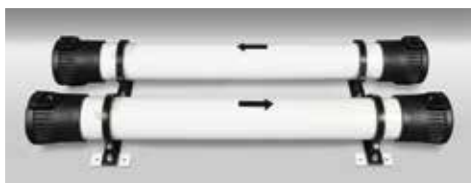
115V • 230V



Simply attach the dock-water supply and Spot Zero hose, rinse-down the hull, glass and chrome surfaces, and let air dry spot free.



Control panel/display with pressure gauges and flow meters (above left) and pre-filter assembly (above right)



Dual semi-permeable membranes

### SZ3000

- Individual components installed in a machinery space
- 130 GPH (492 LPH) capacity
- Draws 8 amps at 115V, 4 amps at 230V
- Compact, modular components offers excellent space-saving installation options
- Custom configurations for maximum installation flexibility and special requirements

115V • 230V



SZ3000 installed on a Westport yacht (above) and Hatteras yacht (right)

## VacuFlush® Toilet Systems

VacuFlush® technology uses stored vacuum energy to clear the bowl instantly and propel waste to the holding tank, resulting in odor-free, clog-free performance.

VacuFlush toilets use very little water per flush (as low as one pint). This not only extends the fresh water supply, but also increases the time between holding tank pump-outs — a significant advantage for vessels operating in waters with overboard discharge restrictions.

### KEY BENEFITS OF A VACUFLUSH TOILET SYSTEM

- Uses powerful vacuum energy for odor-free, clog-free performance
- Extremely low water use — as low as 1 pint per flush
- Multiple discharge configuration options
- Electronic one-touch control or pedal-flush models
- Pedal-operated toilets draw a mere 6 amps per flush
- Fresh water use reduces maintenance and odors associated with raw-water systems



4800 and 4600 models shown with flush switch

### VacuFlush® 4800 and 4600 Series Toilets

- Powerful, electronic-activated vacuum flush
- Ultra low water consumption — only 0.13 US gal. (0.5 l) per flush
- Sloped back (4800) and flat-back (4600) profiles
- All-ceramic fixture
- Sleek, contemporary styling with "soft close" lid
- Toilet/bidet combination model available



12/24V DC



Low-Profile • Standard-Height



Through-Floor Discharge • Above-Floor Discharge



4700 flush-handle and electronic models shown

### VacuFlush® 4700 Series Toilets

- Powerful vacuum flush with handle-activated or electronic flush
- Ultra low water consumption — only 0.13 US gal. (0.5 l) per flush
- Sparkling ceramic finish for premium elegance
- Elongated wood seat and full-scale residential styling
- Chrome flush handle or electronic flush activation
- Normal or Dry Bowl flush options



12/24V DC



Standard Height



Through-Floor Discharge • Above-Floor Discharge



J series vacuum generators shown

### VacuFlush® Vacuum Generators

- Versatile, efficient, and ultra-quiet vacuum source units
- Adjustable components accommodate diverse layouts
- Large 2 in. (51 mm) ID openings improve flow (J Series)
- Precise tolerances of injection-molded tank optimize efficiency and reliability
- Pre-wired and assembled



12/24V DC



M series vacuum pump shown

### M Series Vacuum Pump

- Powers up to eight VacuFlush toilet/vacuum tank combinations
- Ideal for multi-head superyachts and heavy-use charters or rentals
- Heavy-duty bronze body
- Runs dry without damage
- Passes objects up to 1 in. (25 mm) in diameter
- 1/2-HP motor is standard (3/4-HP motor is optional)



12/24V DC • 115V AC





HTS-VG 28-gal. (106-liter) VacuFlush holding tank

### VacuFlush® Holding Tanks

- Completely integrated VacuFlush systems feature waste tank, vacuum generator, and discharge pump in one package
- Compact 6.5-gal. (25 l) and 9-gal. (34 l) VHT models include tank-level sensors
- HTS-VG models have capacities from 10 to 80 gal. (38 to 302 liters)
- Corrosion-proof, leak-proof, and odor-proof performance
- Pre-wired and pre-plumbed for easy installation
- ISO/USCG compliant

 12/24V DC



VHT4500 9-gal. (34-liter)  
vacuum holding tank

## MasterFlush® Toilet Systems

Dometic's industry-leading MasterFlush® toilet system employs a high-efficiency stainless-steel-bladed macerator turbine to pulverize waste for no-clogs. The holding tank can be installed up to 98 ft. (30 m) away.

Superior technology means 64% less power consumption and 33% lower amps per flush than competing models.

### KEY BENEFITS OF A MASTERFLUSH TOILET SYSTEM

- No-clog macerator performance with electronic flush activation
- 64% less power consumption and 33% lower amp draw per flush
- Fresh-water and raw-water systems available
- 98 ft. (30 m) maximum distance to holding tank increases installation flexibility



MasterFlush 7120 model shown

### MasterFlush® 7100 Series Toilets

- Innovative "Orbit" base allows 360° base rotation for virtually limitless positioning to accommodate small spaces and diverse plumbing layouts
- Large residential-style seat and bowl for premium comfort
- Small footprint fits tight spaces
- Integrated electric water valve on fresh-water models
- Flushes as little as 1/3-gallon (1.2 l) of fresh water
- Draws only 20 amps at 12V DC or 10 amps at 24V DC

 12/24V DC

 Low-Profile

 Above-Floor Discharge

NEW



8900 & 8600 models and Dometic Touchpad shown

### MasterFlush® 8900 & 8600 Series Toilets

- Powerful macerator flush
- Ultra low water consumption – as little as 0.45 gal. (1.7 l)
- Sloped back (8900) and flat-back (8600) profiles
- All-ceramic fixture
- Sleek, contemporary styling with "soft close" lid
- Toilet/bidet combination models available

 12/24V DC

 Low-Profile • Standard Height

 Through-Floor Discharge • Above-Floor Discharge



8700 flush-handle and electronic models shown

### MasterFlush® 8700 Series Toilets

- Powerful macerator flush
- Ultra-quiet – integral water trap reduces macerator sound
- Sparkling ceramic finish for premium elegance
- Elongated wood seat and full-scale residential styling
- Chrome flush handle or electronic flush activation
- Normal or Dry Bowl flush options

 12/24V DC

 Standard Height

 Through-Floor Discharge • Above-Floor Discharge

## RushFlush™ Toilet Systems

For offshore vessels that accommodate high-flow toilet systems, RushFlush™ marine toilet technology delivers unmatched power, resource efficiency, and ease of installation compared to similar toilet systems.

RushFlush begins with two hyper-pressurized water lines – one through the upper rim for a bowl-clearing rinse and another at the bottom of the bowl to macerate effluent and drive it to the discharge plumbing.

### KEY BENEFITS OF A RUSHFLUSH TOILET SYSTEM

- Dual high-velocity water jets clear the bowl, macerate waste, and propel effluent to the holding tank
- Pre-assembled integral trapway and discharge loop for faster installation
- No mechanical waste-macerating system required
- Fresh-water, odor-free flushing



### RushFlush™ Series Toilets

- Luxurious, all-ceramic full-scale fixture for home-like comfort
- Standard height with elongated seat and deep bowl
- Electronic flush handle or wall switch activation
- Easy, fast plug-and-play installation
- 3/4 full-tank warning option
- Full-tank shutdown option prevents overfilling of the holding tank



12/24V DC



Standard Height



Through-Floor Discharge • Above-Floor Discharge



## Sanitary Bidets

For the discriminating yacht owner, Dometic Marine offers a space-saving integrated toilet/bidet combo or a free-standing bidet-only fixture.

The integrated model features a fixture-mounted knob that activates the gentle, aerated water flow. Both integrated and free-standing models complement VacuFlush 4800/4600 and MasterFlush 8900/8600 toilets.

### KEY BENEFITS OF DOMETIC SANITARY BIDETS

- Space-saving designs
- Integrated bidet/toilet combination for VacuFlush and MasterFlush systems
- Contemporary styling complements select VacuFlush and MasterFlush toilets
- Gentle aerated bidet water flow (integrated bidet/toilet combo only)



### Integrated Bidet/Toilet for VacuFlush & MasterFlush Systems

- Space-saving integrated model
- Features a gentle, aerated bidet water flow activated by fixture-mounted knob
- Available in standard and low height
- Matches VacuFlush 4800 and 4600 and MasterFlush 8900 and 8600 toilets



Gentle aerated bidet water flow



### Free-Standing Bidet

- Free-standing bidet-only fixture
- Accepts faucet hardware (sold separately)
- Available in standard and low height
- Complements VacuFlush 4800 and MasterFlush 8900 toilets



# An Indoor/Outdoor Challenge In Luxury

## The Challenge

A 60-meter boat from the CRN shipyard in Ancona, Italy, the superyacht *Blue Eyes* is an impressive combination of beautiful design, classic interiors and architectural surprises.

The biggest architectural surprise is her innovative signature feature: An indoor/outdoor Beach Lounge on the aft deck. Where most yachts would house a garage, *Blue Eyes* puts the space to use as an open-air lounge that extends to the sea. At night, it also serves as a romantic dance floor on the water.

The builders knew this beautiful space would seldom be enjoyed if outdoor temperatures drove guests back inside. Their solution? Find a company that could air condition it.

## The Solution

CRN worked with Condaria by Dometic Group to develop a custom solution for this unique, indoor/outdoor area.

To keep guests comfortable onboard, Condaria supplied nearly 1.2M BTUs of cooling and heating power in the yacht's overall HVAC system.

Nowhere is Condaria's custom engineering better showcased than in the indoor/outdoor Beach Lounge. An array of highly efficient, high-velocity blowers are precisely placed to keep the lounge cool without creating unpleasant air blasts that would annoy the guests.

With Condaria's specially designed installation of a robust heating and air conditioning system, guests are kept comfortable by day and by night. Despite having a wall open to the sea, guests can relax and enjoy this elegant indoor/outdoor feature, regardless of the temperature.

## The Result

Voyaging on superyacht *Blue Eyes* is an exciting and luxurious experience that demands being surrounded by ideal environmental conditions, and ideal environmental conditions require an ample and reliable HVAC system.

The Condaria HVAC system achieved this goal, and brought pleasing temperatures to a unique area of the superyacht that is open to the sky and the sea.



CRN 197 ft. (60 m) *Blue Eyes*



The aft "Beach Lounge" on *Blue Eyes*





# Custom Secondary Drain Pan Solves Condensate Spills On Luxury Sailboat

## Overcoming the Spillage Challenge When Heeling

Supplying air conditioning equipment to sailboats can be problematic. Specifically, the heeling of the vessel for an extended period can cause water to accumulate and eventually spill over the side of the pan opposite the drain hole. When this happens, costly water damage can occur.

Ben Haynes, International Technical Sales Manager of Dometic Marine, describes the challenge: "Heeling for long periods of time is an acknowledged challenge for the secure containment of condensate water from evaporator coils. Through our distributor Whiting Power Systems in New Zealand, we were commissioned by Yachting Developments to create a solution that would overcome the problems that are typically associated with sailboat applications."

## Secondary Custom Drain Pan Prevents Spills

*Antares III*, a 100-ft (30 m) composite sloop built by Yachting Developments and air conditioned by a 108,000 BTU tempered water system supplied by Cruisair, recently benefited from the solution: Custom-made drip trays which were fitted under the existing AT air handlers to catch any excess condensate.

Functioning as secondary drain pans, these custom drip trays have their own drains to rapidly remove any spills, and the drains of the original pan are plumbed directly through connections in the secondary pan for an integrated drainage solution. The drip trays also provide a secure mounting platform for the AT air handlers and were easily installed. A further advantage of the secondary pan is that it can catch overflow water if the primary pan gets clogged when the boat is at any angle.

## Builder and Supplier Work Together to Satisfy Customers

"By drawing on the knowledge and experience at Dometic Marine, we are able to work closely with yacht builders to supply reliable system solutions which can be designed in accordance with specific customer needs," said Murray Deeble, Sales Engineer for Whiting Power Systems. "This capability, backed by our commitment to provide excellent installation and service support, ensures our customers are happy with the end result."

In May 2012, *Antares III* was named winner of The World Superyacht Awards 2012 in the 30 to 40 meter sailing yacht category.



Air handler with retrofitted secondary drain pan



The original drain pan is plumbed to drain holes in the custom drip trays



The award-winning 100-ft. (30 m) *Antares III* sailboat by Yachting Developments



# Marine Air Conditioning That Conquers Desert Heat

## The Challenge

When Steve Creamer began building *Crystal Angel II*, a customized 85 ft. (26 m) tri-deck motor yacht that would cruise the vast waters of Lake Powell in the high desert region of Page, Arizona, his primary concern was the effectiveness of her air conditioning system. Often entertaining family and friends aboard his yacht, Creamer knows the importance that a comfortable climate makes to the enjoyment of the voyage.

Cruising in an area where temperatures often reach more than 100°F/38°C, the air conditioning system had to be exceptional. In fact, Steve Creamer's number one stipulation for the build was that this luxury yacht be air conditioned properly so it would stay cool in the desert heat. To accomplish this goal, he turned to Dometic Marine.

## The Solution

To meet his requirements, Dometic Marine installed a 360,000 BTU Marine Air modular chilled water system that was specially designed to tame the heat of the region and address the yacht's unique characteristics. In addition to determining the proper load requirements, Dometic Marine worked with the boat builder to test several variations

of the air conditioning system using various plenums and air flow configurations to optimize performance and also reduce noise.

## The Result

The resulting installation was successful. *Crystal Angel II* went into the water in June 2011, and the air conditioning system is keeping guests cool and comfortable while they enjoy the breathtaking desert terrain of Lake Powell.

"Our representative and the team at Dometic have been extremely supportive of our project through both startup and after-support — from the early conceptual design, through detail design with the interior designer — to create a unique air distribution system which integrates the distribution and return systems into the ceiling beam system," said Creamer.

"Having had a Dometic system on the *Crystal Angel I* for seventeen years, I knew the quality of Dometic's systems. The quality of the people and the support of the company have been very impressive," he said.



Custom built 85 ft. (26 m) *Crystal Angel II*



Interior of the *Crystal Angel II*





# The Luxury of a Perfect Fit

## The Challenge

Custom yachts often demand custom systems. When it comes to chillers, required capacity and available space in the engine room don't always coincide. The challenge is to find an HVAC manufacturer that has both a broad variety of chillers to fit a variety of spaces and the capability to provide custom engineering when required.

## The Solution

The naval architects at Sunseeker International, a global leader in the design and building of luxury motor yachts, appreciate working with the experienced HVAC engineers at Dometic Marine. With a broad range of product shapes, sizes, and capacities to choose from, the right product can often be ordered straight from the catalog. And for more challenging applications, they can rely on custom-built chillers to meet their needs. The naval architects are free to focus on yacht design instead of HVAC challenges.

Dometic Marine's expert engineers work with Sunseeker's naval architects to recommend the system capacity necessary for ample onboard comfort. The engineers then arrange the multi-stage chiller and its frame to fit into the space available in the engine room, redesigning elements if necessary to meet height and width specifications.

Bespoke chiller frames can even be designed to hold other engine-room equipment to better utilize limited overall space.

For the Sunseeker Predator 84, Dometic Marine provided a two-stage Marine Air MCW Low-Profile chiller with total capacity of 120,000 BTUs (10 tons). The low-profile design fits into height-restrictive spaces. Its compact footprint allows flexibility in space usage and layouts.

Also included with the Predator 84's chiller system is a Digital Diagnostic Controller that monitors and protects the system through the use of sensors, pressure switches, timers, and freeze controls, all programmed to display on an LED panel for immediate diagnosis.

## The Result

Naval architects can focus on boat design instead of HVAC design, which has earned Dometic Marine the prestigious status of "Sunseeker Approved Supplier".



Sunseeker Predator 84 ft. (Image courtesy of Sunseeker International)



*Approved Supplier*



# Tournament Fishing Boat Clears the Air With the Breathe Easy™ In-Duct Air Purifier

## Plagued By Unhealthy Air

Champion sport fishing vessel the Big Oh and its crew spend many days at sea competing in some of the world's biggest tournaments. During tournament season, when boat owner Gray Ingram lives aboard his boat, he noticed that cooking and other odors lingered in the saloon, and that his sinuses became congested when sleeping on-board.

Due to the damp and confined nature of on-board living spaces, stuffy, smelly and unhealthy air is common on boats of all sizes. The build-up of fumes, odors, mold, and volatile organic compounds (VOCs) create problems for many boaters. Poor ventilation leads to dampness that causes unpleasant smells and contributes to health issues such as eye and respiratory-tract irritation.

Cooking on-board, especially meals featuring fish, added another dimension of pungent, lingering odors to the indoor environment of the Big Oh.

## Salvation Through In-Duct Air Purification

To remove the contaminants that caused odors and unhealthy air, Ingram installed two of Dometic's Innovation Award-winning In-Duct Breathe Easy tubes to purify the air. The first Breathe Easy was installed in the boat's saloon to eliminate cooking odors, and to eliminate the

contaminants causing his breathing problems, a second was installed in the master stateroom.

Designed to work silently within the ducting of a yacht's air conditioning system, the Breathe Easy tubes use ultraviolet light and photocatalytic nano-mesh technology to remove up to 99.9% of the biological and chemical contaminants—including the odors of tobacco smoke, mildew, mustiness, chemical vapors, and toilets. The result is fresher, cleaner and healthier air for everyone on board.

With each re-circulating pass through the air conditioning system equipped with Breathe Easy tubes, the contaminated air aboard the Big Oh became cleaner, healthier, and odor free.

## The Sweet Smell of Victory Over Bad Air

"We cook a lot on-board, and the Breathe Easy gets rid of the smells real fast," said Ingram. He added, "I live on-board when we travel and always had problems with congestion and sinus drainage, but have not had a problem since we installed the Breathe Easy."

"I'm very pleased with the product and will definitely have Breathe Easy units on-board any new boats I get in the future," he said.



The Big Oh and owner Gray Ingram



The Breathe Easy In-Duct Air Purifier installed (top) in an air conditioning duct





# Seaforce IX Freshens On-Board Air Quality With Powerful Breathe Easy™ Air Purifiers

## Interior Cabins Prone to Stale, Musty Conditions

Seaforce IX is a builder of some of the most elite, high-performance luxury yachts in the world, with sizes ranging from 61.5 to 116.5 ft. (18.7 to 35.5 m). Seaforce IX is focused on all aspects of each yacht's design and build to ensure their customers get the ultimate boating experience.

By their confined nature and exposure to water, boats of all sizes are prone to developing unpleasant odors and poor on-board air quality. Lingering cooking and tobacco odors, mildew, mold, and even volatile organic compounds (VOCs) can cause unhealthy conditions for the occupants. Seaforce IX sought to enhance the luxury of their yachts by eliminating these problems.

"Our aim with all of our yachts is to provide five-star luxury on the water," explains Rick Hyer, design engineer for Seaforce IX, which is based in Palmetto, FL. "A clean air environment on-board any vessel is becoming more of a priority for owners, guests and crew, so we were delighted when Dometic presented its Breathe Easy In-Duct air purifier to us."

## New Life to Old Air with In-Duct Breathe Easy

Winner of the 2010 IBEX Innovation Award, the Breathe Easy In-Duct Air Purifier is a tube-shaped unit that is installed within the air conditioning duct. Using non-ozone-producing ultraviolet light and photocatalytic nano-mesh technology, it works silently and effectively to neutralize odors and impurities that make contact with the nano-mesh structure.

"The innovative system is proven to significantly reduce airborne contaminants, mold spores and odors in superyacht living spaces and we will be installing it aboard our flagship vessels," said Hyer. "This is just one example of how Dometic helps us to stay ahead of the game, solving the problems of our customers before the question has even been asked."

## On-Target Air Filter Performance Delivers Satisfaction

"Our customers have very high expectations for comfort on-board and air conditioning is absolutely critical for optimum temperatures and humidity removal, which is why we install HVAC systems from Dometic Marine," said Hyer. "Now, the Breathe Easy air purifier makes the air coming from their air conditioning system cleaner and healthier to breathe."

"With a client base such as ours, proper function and reliability of the air conditioning is paramount as system failure isn't an option," Hyer said. "The team at Dometic Marine offer a wealth of knowledge and experience to ensure we have a system solution that satisfies exact client specifications. They are also on hand to oversee system installation to ensure optimum performance of the air conditioning."



A luxury sport fisher by Seaforce IX yachts



Breathe Easy In-Duct air purifier being installed in an air conditioner duct line



# Powerful Cooling Keeps Skipper Motoryacht Charter Customers Comfortable

## Tormented by Noisy Air Conditioning

Private charter vessel, *Lady of the Lake*, is a 105-ft. SkipperLiner, a motoryacht built by houseboat and custom yacht builder Skipper Manufacturing LLC. Used by up to 150 guests on any one cruise, the provision of reliable air conditioning aboard is essential to ensure the comfort of passengers and crew as well as satisfy owner expectations.

Hot and sweaty cabins can be detrimental to a guest's experience, as can the constant humming and vibration of an air conditioning unit, but cooling a large yacht can also have negative implications on the power source, causing wider problems.

## Keep Quiet, Avoid Blackouts With Slim Cruisair HVAC

To ensure reliable delivery of efficient cooling and heating without noise pollution or brown or black-outs on-board *Lady of the Lake*, Dometic's custom-built chilled water equipment provides the yacht with 480,000 BTUs (40 tons) of cooling and heating capacity.

The complete Cruisair HVAC (heating, ventilation and air conditioning) system includes a three-stage chiller with 21 standard and low-profile air handlers which are designed to be discreet and use minimal overhead space. Further advantages include flexible load management and often a reduced peak electrical load.

## A Peaceful Triumph Over Stifling Surroundings

Quieter, reliable and efficient systems have provided a comfortable environment for passengers and crew, ensuring their enjoyment on-board is maximized.

Bernie Clements, Purchasing Manager at Skipper Manufacturing, said: "Having worked with Dometic for several years, the team has proven to offer HVAC solutions which meet the specific requirements of virtually any application and they are also on hand throughout the duration of the project to provide exceptional technical support."



Skipper Manufacturing's 105-foot charter motoryacht *Lady of the Lake*



Cruisair three-stage chiller installed on *Lady of the Lake*



ATL series air handler such as the one used on *Lady of the Lake*





# Gunboat's Rugged Catamaran Gears Up With Air Conditioning By Marine Air

## Oppressive Tropical Heat a Reality at Sea

Gunboat, based in Newport, Rhode Island, manufactures high-tech, all-carbon fiber catamarans from 55 to 90 ft. (16.8 to 27.4 m) that are designed to sail around the world in luxury. Gunboat crafts perform at high speeds and offer the ultimate in safety and comfort, so long cruising runs are possible.

Gunboat strives to incorporate many home-style comforts into their vessels — including reliable air conditioning.

## Dometic's Marine A/C Systems a Very Cool Choice

Providing the ultimate cooling capabilities for owners and passengers alike, Gunboat uses Dometic's Marine Air air-conditioning systems.

Marine Air systems can be serviced worldwide and have tremendous cooling capacity. For example, on the 66 ft. Gunboat Tiger Lily, Marine Air Vector Turbo (at left) units were installed. The main saloon utilizes two 16,000 BTU units, while the master and VIP staterooms are equipped with 8,000 BTU units. All the units have sound shields that reduce noise by 50 percent.

Advantages of the Turbo series include a completely revolutionized self-contained cooling and heating system with patented innovations in

air conditioning design. The rust-free molded composite drain pan has three drains for the rapid removal of condensate water, and an advanced cushioning system results in quieter, virtually vibration-free operation. The enclosed blower motor eliminates overhang to provide easier installation.

The Turbo series was recently re-engineered to harness and maximize the impressive performance of R-410A refrigerant. R-410A is proven, reliable, and complies with all EPA standards and is accepted worldwide.

## On-Board Comfort a Reality Anywhere

"We use Dometic Marine Air air conditioners and the reason we've picked them is that they're bomb proof," said Peter Johnstone, CEO of Gunboat. "They can be serviced pretty much anywhere in the world. Everyone we have working for us knows how to install them. They are really the standard in the industry."

Ocean Options, a Marine Air distributor based in nearby Tiverton, Rhode Island, works on the Turbo units on the catamaran.

"Ed Hamilton at Ocean Options is always taking great care of us," Johnson said. "He solves problems and is really super to work with."



Gunboat manufactures high-speed luxury catamarans with carbon fiber twin hulls

Peter Johnstone, CEO of Gunboat



Award-winning Turbo self-contained air conditioning





# Dometic's Breathe Easy™ Freshens Air Aboard 95-foot Charter Superyacht

## Sore Throats, Coughs Caused by Bad Conditions

Life aboard a luxury motoryacht should be about visiting exotic locales; it shouldn't be about battling nagging coughs caused by contaminated air. However, sore throats and coughs were plaguing the crew aboard a 95-foot charter superyacht out of Fort Lauderdale.

A four-bedroom flybridge charter vessel served by a crew of four was in dire need of help to improve air quality within her staterooms and hallways.

"I have been on board for about three years now and the air situation was getting progressively worse," said James Rose-Innes, the yacht's first mate. "Near the end we even had contractors that were going home sick. We were pulling out all the ducting and plenums, and there were a lot of mold spores."

While unpleasant odors are an obvious sign of poor air quality, many contaminants are odorless and more frequently evidenced through physical reactions like coughing, sneezing, sore throat and watery eyes. Indoor air can easily be five times more polluted than outdoor air.

## In-Duct Air Purification Provides Relief

Because on-board living spaces are confined and stuffy, unhealthy air is common on boats of all sizes. Fumes, odors, mold, and volatile organic compounds (VOCs) can build up and create problems for crew members and guests.

"We always had a problem with charter guests complaining about having sore throats after being onboard for only a few days," Rose-Innes said. "And the crew had a consistent problem with sore throats and coughs. So we have gone to Dometic, and as soon as we put the Breathe Easy Air Purifiers in the guest areas, we discovered that the air just changed completely."

Designed to work silently within the ducting of a yacht's air conditioning system, the Dometic Breathe Easy tubes use ultraviolet light and photocatalytic nano-mesh technology to purify air to remove up to 99.9% of the biological and chemical contaminants — including mold spores, bacteria, and the odors of tobacco smoke, mildew, mustiness, chemical vapors and toilets. The result is fresher, cleaner and healthier air for both the crew members and guests aboard the superyacht.

## Superior Air Quality Noticeable to All

The Dometic Breathe Easy's photocatalytic air purifier silently transforms the contaminated air and returns significantly cleaner, healthier air back into the cabin.

"After installing the in-duct Breathe Easy units it was easier to breathe and a lot more of a pleasant experience down on the lower decks," Rose-Innes said. "The air feels cleaner and sterile."



Mold thriving on the A/C blower's fan blades



Mold growing on insulation in the yacht



The Breathe Easy In-Duct Air Purifier installed (top) in an air conditioning duct



First Mate James Rose-Innes







# Chemical Fumes & Odors Cleared by In-Duct Breathe Easy™ On Southern Cal Marine Refit

## Odors Accumulates As Work Progresses

Even superyachts need extreme makeovers, and that best describes the scene aboard the *Huracan*, a 125-foot expedition superyacht that underwent an extensive refit at the Gran Peninsula Yacht Centre in Mexico. Over the course of a year the yacht was laid bare as tradespeople made significant improvements to the yacht's style and function.

"Coming out of an 18-month shipyard period, you have a lot of things that can be left behind because of the work that has been done on the boat," *Huracan* Capt. Shawn Baker said. "The owner is very in-tune with what goes into his boat. Even though the boat has been refitted, inevitably they accumulate a smell."

## Fresh Fittings Deserve Fresh Air

Upholstery, curtains, carpeting, cleansers, adhesives and other chemicals put volatile organic compounds (VOCs), fumes and other odors into the air. Aboard a confined space such as a yacht, the odors do not dissipate quickly. By installing four Breathe Easy™ in-duct air purifiers in key locations within *Huracan's* HVAC system, unwanted odors created during the refit process were removed.

"The Breathe Easy helps clear the air of any airborne contaminants," Capt. Baker said. "It's new for us - we've never had that luxury. The professionalism and the knowledge of Chris Muntz, sales manager at Southern Cal Marine, and Dometic have made it a pleasure. Those guys at Southern Cal Marine really know their stuff."

The Breathe Easy in-duct is a tube-shaped unit which can be simply and cost-effectively installed within the ducting lines and uses the HVAC system's blower to move air through the purifier. Once fitted, it operates silently, purifying and cleansing the air using Photocatalytic Nano-Mesh technology with non-ozone-producing UV light.

## Underway and Odor-Free

"The Breathe Easy in-duct takes care of the odors," Capt. Baker said. "We don't have to cover a smell because we don't have a smell. The quality of life aboard has improved because the air you breathe is significantly enhanced. It's better than breathing re-circulated air. Now we can have air similar to the quality of the air that's outside."



125-foot expedition superyacht *Huracan*



Breathe Easy In-Duct air purifier being installed in an air conditioner duct line



# Silence Triumphs On Blue Jacket 40 With Emerald Split-Gas A/C System

## Compressor Noise Disturbs Tranquility In Cabins

The Blue Jacket 40 is a modern interpretation of a performance cruiser and features a three-cabin arrangement, with an option for a two-cabin layout, with the amenities and build quality expected of a luxury sailing yacht.

During the design phase, eliminating noise of any kind was always a priority. One particularly annoying feature of air-conditioning systems is compressor noise. However, today's new split systems mean the compressor can be located separate from the evaporator, and the compressor can also be insulated for sound if needed.

"Reducing noise was integral in the design," said Bill Bolin, vice president of sales and marketing for Blue Jacket Yachts. "It's really a matter of comfort and getting the sounds out of the living compartment."

## Emerald Series' Quiet Efficiency a Cool Way to Go

"The Emerald Series was selected because of the small footprint and compact size of the equipment and the efficiency of the R-410 refrigerant," said Pat Peterson, Managing Director of Peterson Marine, a Dometic Marine dealer. "These characteristics worked perfectly with the way we wanted to air condition this particular design."

Operating with R-410A environmentally safe green gas, Dometic's Emerald Series is a range of direct-expansion split HVAC systems which provides increased efficiency by using fewer amps per capacity and offers a refined, quieter system that maximizes performance and durability.

"The split system, isolating the compressor noise from the living compartments, was a perfect solution on the Blue Jacket 40 as a luxury performance cruiser," Bolin said. "Peterson Marine, the local agent/installer for Dometic, has been a favored vendor of ours for some time."

## Small Evaporating Unit's Dimensions a Perfect Fit

The Blue Jacket 40 contains a single 16,000-BTU Emerald condensing unit connected to two TurboVap evaporating units.

"Dometic Marine has engineered TXVs [Thermal Expansion Valves] on these new TurboVap evaporators," Peterson said. "This allows the best balance of refrigerant, making a single compressor, two evaporator system the most efficient."

"We are confident that the work completed on this project and lay-out will provide the platform for us to work on future Blue Jacket 40 models which are ordered with the air-conditioning option," Peterson said.



40-foot cruising sailboat by Blue Jacket Yachts

Bill Bolin, VP of sales and marketing for Blue Jacket Yachts



Emerald TurboVap (above left) and condensing unit (above right)







# Dometic MARINE

To find out how we can meet your HVAC, sanitation, ship-wide ventilation, or water purifier needs, please contact us by phone or email. We look forward to hearing from you.

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Dometic Marine, a division of Dometic Group, is the world's largest supplier of innovative and technologically advanced comfort systems and equipment for yachts and pleasure boats and a major supplier of HVAC, engine room ventilation, and toilet systems to the commercial, workboat and military markets.

A specialist supplier to OEM, refit and repair and aftermarkets, Dometic Marine has an unmatched support network of company-owned offices located in 12 strategic regions across the globe supported by numerous marine R&D facilities and factories. The products are further supported in the field by factory-authorized distributors, dealers and service engineers offering a global presence in over 100 countries worldwide.

Leisure boats from 20 feet to mega-yachts are users of the company's premium brands which include Condaria, Cruisair®, Dometic, Marine Air Systems®, SeaLand® and WAECO. Their extensive product range includes marine air conditioning, engine room ventilation systems, sanitation systems, refrigerators, stoves, battery chargers and other equipment for the leisure market.

Dometic's commercial HVAC and engine room ventilation systems can be fitted to the broadest range of commercial vessels and conform to NMMA and ASHRAE standards; the company is ISO 9001:2008 certified.

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