

CATALOG 2018

# MOBILE LIVING MADE EASY.

CLIMATE, REFRIGERATION, AND SANITATION PRODUCTS  
TO HELP MAKE YOUR JOB EASIER.

 **DOMETIC**



Working at sea demands ruggedness — in body, in spirit, and in the equipment you choose.

With over 55 years of experience producing seaworthy air conditioning systems, ship-wide ventilation systems, refrigerators and watermakers, Dometic brings expertise and reliability to products designed for the coastal and offshore commercial marine industry.

From our powerful marine-grade chillers for larger ships to direct expansion units designed for the unique spaces of smaller vessels, our extensive lines of air conditioning systems handle the job. Our ship-wide ventilation systems include a diverse range of fans, blowers, mist-eliminating grilles, and smoke and fire dampers.

Our Dometic Sea Xchange reverse-osmosis watermaker systems desalinate seawater, providing unlimited potable water on-board. Our broad range of built-in and portable refrigerators and freezers fit any space and meet any need.

In addition, Dometic's premium-quality, proven toilet systems include vacuum, macerating, and gravity-discharge technologies.

When it comes to innovation, versatility, and reliability, our product lines are unmatched in the industry.

Dometic proudly serves the needs of maritime commerce in a global market.



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## ENVIRONMENTAL POLICY

Since 1994, Dometic 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 is committed to minimizing the environmental impact of our products through regular assessment of energy and material demands, emissions, waste generation, and recyclable resources.

## DOMETIC ON THE WEB

Here's where you can find the complete Dometic range, with detailed information about all products. Plus, interesting facts about our company and download links for all our catalogs.

**DOMETIC.COM**

# DOMETIC: YOUR SINGLE-SOURCE SOLUTION FOR AIR CONDITIONING, SHIP-WIDE ENGINE VENTILATION, WATERMAKERS, SANITATION, AND REFRIGERATION

With more than 50 years of experience, Dometic is the single-source provider of complete air conditioning, engine room ventilation, air purification, water purification, refrigeration, and sanitation systems. Our products are trusted throughout the world and installed on vessels such as:

- OSVs
- Military patrol vessels
- Passenger ferries
- Tug boats

## CUSTOM & OFF-THE-SHELF SOLUTIONS WITH JUST ONE CALL

Dometic 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. For extremely long service life, all of our Titan smooth-tube chillers now use titanium in the condensers instead of industry-standard cupronickel.

## GLOBAL SUPPORT FOR GLOBAL USE

Regardless of a vessel's state of completion or its physical location in the world, Dometic's support network is always nearby.

A specialist supplier to OEM and refit, repair and aftermarkets, Dometic 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 are located in over 100 countries worldwide to provide service in the field, giving Dometic the world's largest sales and support network.

## THE CRITICAL ROLES OF HVAC & ENGINE ROOM VENTILATION

**HVAC:** A reliable and ample air conditioning system is essential in any workboat design, and must be engineered for the unique characteristics of each workboat, military or commercial vessel.

Assessing real-world air conditioning requirements takes experience and specialized knowledge. Dometic's senior engineers will design your vessel's HVAC system with the same attention and expertise you give to the design of the ship itself.

**ENGINE ROOM VENTILATION:** Fans, blowers, smoke and fire dampers, mist-eliminating grilles, and electronic fan controls help keep engine rooms running smoothly and safely. For all products, Dometic chooses materials with corrosion resistance and weight in mind.

Commercial-grade fans and blowers provide cooling and/or combustion air for marine machinery spaces.

Smoke and fire dampers close off the engine space in the event of a fire and are Lloyd's approved and MCA compliant for applications requiring A-60 boundaries in accordance with FTP code.

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 for a given machinery package.

Pressure- and temperature-monitoring fan controls can be manual variable speed, temperature controlled, pressure controlled, or pressure and temperature controlled – all standard with fire-system shutdowns.

DOMETIC: A GLOBAL SPECIALIST SUPPLIER & SERVICE PROVIDER TO OEMS & THE AFTERMARKET

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# THE THREE BIGGEST CHALLENGES WHEN CHOOSING THE RIGHT HVAC MANUFACTURER

Dometic 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'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 can also supervise installation and provide on-site training and documentation to your crew.

**CHALLENGE #2: SELECTION** — Dometic provides the world's broadest range of chilled water systems, including air handlers and controls. Our chillers provide up to 2.4 million BTUs of cooling or heating and come in a variety of configurations, with custom designs available. Our air handlers feature "WhisperCool" technology and 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 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 ASHRAE and other industry standards, and our manufacturing facility is ISO 9001:2008 certified.

## SAMPLE OF OUR COMMERCIAL, WORKBOAT AND MILITARY CLIENTS:

### OWNERS/OPERATORS/BUILDERS

- ACP, Autoridad del Canal de Panama
- A.F. Theriault & Son Ltd.
- All American Marine
- Allicat
- Al Fattan
- Aresa
- Armon
- Armstrong Marine Inc.
- Austal USA
- Bahamas Marine Int'l Inc.
- Baker Hughes
- Baltic Workboats
- Barcas Transportes Maritimos
- Bollinger Shipyard
- Bronswerk Marine Inc.
- Buquebus Shipyard
- BW Offshore
- Caprock Comunicacoes do Brasil Ltda.
- Cheoy Lee
- Colle Maritime Company
- Cotecmar
- Custom Steel Boats Inc.
- Damen
- Derecktor Shipyards Inc.
- Detroit Chile
- Dockstavarvet
- Dragamex SA De CV
- Elevating Boats LLC
- EPG Trading S.A.C.
- ETP Engenharia Ltda.
- Freire
- G&H Towing
- Geo Shipyard
- Gondan
- Goodchild Marine
- Grandweld

- Gulf Coast Shipyard
- Hike Metal Products Ltd.
- Huntington Ingalls
- Inace Shipyards
- Intertug
- Island Logistic, S.A.
- Juneau Marine
- Kvichak Marine Ind. Inc.
- Leeshore Boats
- Lemoine Marine Refrig-Ship
- Lestada Comercio Imp/Exp Ltd.
- Marine Alutech
- Marine Express Com. Imp/Exp
- MarinTec Ltda.
- Metal Craft
- Metal Shark
- Midship Marine Inc.
- Moose Boats Inc.
- MTN
- Navantia
- NavTec Ltda.
- NC Dept. of Transportation
- Nichols Brothers
- North River Boats
- Oregon Iron Works
- OTM Remolques
- Prime Mechanical
- Qwest
- Red Seagull Oil & Gas LLC
- Renegade Power Boats Inc.
- Roeling Marine
- Rozema Boats
- SAAM Remolques
- Safe Boats
- Safehaven Pilotboats
- Scarano Boat Building
- Sea Tel Inc.

- Servicios Ind. De La Marina SA
- Siem Offshore Do Brasil SA
- Silver Ships Inc.
- SIMA-Chimbote
- Somerc S.R. L.
- South Boats Special Projects Ltd.
- Statue Cruises LLC
- Tampa Yacht Manufacturing LLC
- Tecnavin S.A.
- The Marine Group LLC
- Todomar ChI Marina S.A.S.
- Triton Submarines
- TSM Remolques
- Tugs Brasil
- Vectorworks Marine LLC
- Wedgeport Boats Ltd.

### DESIGNERS/NAVAL ARCHITECTS

- Elliott Bay Design Group
- Guido Perla & Associates
- Robert Allen & Associates

### GOVERNMENT AGENCIES

- British Navy
- Chinese Navy
- Israeli Navy
- Japanese Navy
- Russian Navy
- Turkish Navy
- US Coast Guard
- US Navy

A dark, moody photograph of a rocky coastline. The image is dominated by a large, craggy rock formation on the left side, which extends towards the center. The rock surface is highly textured with various cracks and ledges. To the right, the ocean is visible, with gentle waves breaking against the rocks. The sky is a uniform, dark grey, suggesting an overcast or stormy day. The overall color palette is monochromatic, consisting of various shades of grey, black, and white. The word "CLIM" is overlaid in a large, bold, white, sans-serif font on the right side of the image, partially overlapping the rock and the sea.

**CLIM**



**ATE**

# COAST GUARD TRAINING BOATS DISCOVER NEW AIR CONDITIONING SOLUTION FOR COOL CABINS

## HOT & STUFFY CABIN AFFECTS CREW TRAINING

Metal Shark Aluminum Boats specializes in the production of aluminum-built commercial, military and governmental boats to support an extensive range of applications. For one of the builder's projects with the US Coast Guard, the manufacturer required the provision of reliable air conditioning.

Training in a hot and stuffy floating classroom can negatively affect the productivity of crew members and so it was essential to install on-board air conditioning to ensure the provision of a comfortable environment that allows for delivering training programs all year round.

## SWINGING DOORS AND OPEN WINDOWS MEANS LESS EFFECTIVE AIR CONDITIONING

Chris Allard, President of Metal Shark Aluminum Boats, explained: "Keeping a vessel such as the 38 Defiant cool can present its challenges. To ensure excellent visibility, the boat has several windows and although these can be opened, in warm climates the boat effectively becomes a greenhouse.

"Also, as part of the Coast Guard training program, the crew is frequently moving around the vessel. Doors are often left open, which can cause the air conditioning to be less effective."

## AIR CONDITIONING SOLUTIONS TO MEET SPECIFIC NEEDS

Through close collaboration with customers, Dometic is able to develop HVAC equipment to satisfy exact vessel requirements. In order for Metal Shark to overcome its challenges, Dometic equipped each 38 Defiant with three Turbo 16,000 BTU/hr systems to maximize the cooling capacity as well as to offer redundancy.

"Having worked with Dometic on several projects, we know they are a supplier we can trust. Whether we are sourcing air conditioning, toilets or fridges, Dometic's wide range of systems provide exceptional reliability, while its team is able to offer specialist and dedicated support, working with us to find equipment of the right size and configuration for a multitude of applications," Allard concludes.

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# DOMETIC HVAC EQUIPMENT ENSURES YEAR-ROUND OPERATION FOR LIVE-ABOARD FIREBOAT

## HARSH TEMPERATURES CHALLENGE FIREBOAT CREW

For a vessel operating in the Boston Harbor area, where annual temperatures range from below freezing to extremely hot and humid, the builders of a live-aboard fireboat had to make an important decision about their choice of HVAC equipment.

For more than 70 years, A.F. Theriault & Son Ltd. has built robust vessels from a variety of materials including steel, aluminum, fiberglass and advanced composites. One of the company's projects was the construction of a fireboat for Massport, the Massachusetts Port Authority. The Massport fireboat 31 has crew living aboard, so reliable heating and cooling is a must to ensure the vessel is equipped to operate in all climates.

## HVAC PLACEMENT SUPPORT SPEEDY RESPONSE

Required to respond quickly to emergencies that occur anywhere on the docks or shore side, fireboats must be lightweight to maintain the high speeds required for a fast response. Placement of the HVAC equipment was top priority to ensure that the weight was positioned proportionately so as not to affect the performance of the vessel.

The fireboat has a Dometic 10-ton, 2-stage MCG chiller on-board that provides heating and cooling to five accommodation areas including the crew lounge, transport room and lower deck. In addition, the chilled water HVAC equipment also cools the sensitive electronics on-board, protecting them from overheating.

## GREAT INSTALLATION AND AFTER-SALES SERVICE

According to A.F. Theriault & Son Ltd, it is Dometic's ability to provide reliable, high-performance systems that are backed by exceptional customer service that makes Dometic its first choice for HVAC equipment.

Graham Oakley, VP of New Construction, A.F. Theriault & Son Ltd, commented: "We have installed Dometic systems on several yachts and we know it is equipment we can trust. Dometic is also on hand throughout the duration of the project to offer great technical support and peace-of-mind to ensure everything will run smoothly.

"From the initial brief through to installation, they handle BTU load/capacity calculations, are able to design the systems in accordance with our specifications and can also advise on system placement to maximize performance if required, so they are very easy to work with."



# DOMETIC MIST ELIMINATORS, DAMPERS THWART SALTWATER SPRAY

## CORROSIVE EFFECT OF SEAWATER CAN RUIN ENGINES

When Smith Brothers of Galesville, Md., began work on the new 50-foot (15.24 m) shallow-water draft tug Capt. Kenneth, developing a way to keep saltwater spray from getting inside the engine room was important and mist-eliminator grilles from Dometic were the solution.

Ensuring the engines don't ingest saltwater spray can reduce costly repairs and extend engine life. However, new U.S. Coast Guard regulations for fire prevention require damper devices on engine room inlets and exits, requiring further modifications of the design.

## CUSTOM DESIGN SATISFIES ALL THE REQUIREMENTS

"We have taken a proactive approach and worked closely with the Coast Guard, asking them what they would like to see, which saves a lot of money," said Preston Hartge, general manager of Smith Brothers. "Unfortunately, the mandatory dampers used the space where the mist eliminators were intended to go."

Dometic designed a unique solution that mounts the mist eliminators on the side of the boat rather than protruding into the engine room. Located just aft of the pilot house door, the mist eliminator frame was modified so it would not block the shallow depth of the air trunk.

## ON-TIME DELIVERY KEEPS PROJECT ON SCHEDULE

"Dometic makes a good product and its team does what it says it is going to do," Hartge said. "Being on time is a big part of building any boat. Money is always a concern, but if you have a company that stays within the lead time, then that is very important."

# RAMPING UP CHILLED WATER AIR HANDLERS FOR MAXIMUM COOLING

## EXOTIC LOCALES REQUIRE POWERFUL AIR CONDITIONING

Dockstavarvet's Combat Boat 90 H (CB 90) is a versatile "workhorse at sea" in use by the Mexican and Malaysian navies operating in hot and humid climates. CB 90 crews endure sweltering conditions while chasing down drug smugglers in go-fast boats.

Conditions inside the cabin, which can be locked down to withstand nuclear, biological and chemical warfare, can become unbearable. "The challenge is to keep the boats cool by maximizing the performance of the A/C system on board," said Gustaf Hamrén, Key Account Manager for Dometic. "The system needs to perform with the genset power available."

## MARINE AIR EQUIPMENT PROVIDES COMFORT & RELIABILITY

Outfitting the CB 90 with two 16,000 BTU/hr Marine Air CHC compact chillers was the perfect solution to thwart the tough weather conditions.

In the case of the Mexican navy, which battles a variety of renegades in the Gulf of Mexico, the chillers are scorched and brown on the outside, but keep running.

The space-saving compact base of the CHC units was designed to allow individual modules to be multiplexed to provide precise capacity requirements for any application. Thermodynamically matched components assure maximum chiller performance, and the efficient compressors are quiet and consume less power. In addition, fewer moving parts provides for better reliability.

## DOMETIC'S SUPERIOR SERVICE ENSURES PEAK PERFORMANCE

Dometic's global service team operates from Coatzacoalcos, a major port city in the southern part of the Mexican state of Veracruz, on the Coatzacoalcos River, where Dockstavarvet maintains a service yard.

"We have used Dometic's air conditioning because of its light weight—our boats are high speed and lightweight," said K. A. Sundin, owner and Chairman of the Board of Dockstavarvet. "Also we use Dometic because of the worldwide support."



# AIR COND

# ITIONING



## TUG BOAT BUILDER SIGNET MARITIME FIGHTS WINDOW HEAT IN PILOTHOUSE

### VITAL ELECTRONICS & CREW SUFFER FROM OVERHEATING

Working at sea can be tough, so the availability of sufficient cooling on-board is essential, not only to provide a comfortable and healthy work environment for crew, but also to protect vital electronic equipment from overheating and potentially breaking down.

Established in 1976, Signet Maritime is an international marine transportation company specializing in the build of high performance tug boats. Tug pilots need unobstructed visibility, but with lots of glass windows to contend with, a pilothouse can feel like an overheated greenhouse. The crew suffers and the electronics are put in jeopardy.

Therefore, when designing its Signet 82-Metric Ton Bollard Pull Z-Drive tugs, the builder wanted to ensure the vessels would be equipped with ample high-quality air conditioning that would be reliable in any climate as well as easy to service and retrofit in the future.

### MODULAR CHILLERS FIT THE BILL AND DOORWAYS

After analyzing the boat's architectural characteristics and their effects on heat-load calculation and equipment placement, Dometic arranged delivery and installation of modular cutting-edge chilled water equipment.

Providing each vessel with 240,000 BTUs (or 20 tons of capacity) are two 120,000 BTU/10-ton Dometic MCW chilled water systems specifically designed and packaged to meet the requirements of each ultra-high performance ASD tug to cool the vessels' on-board spaces.

"The older equipment used on tugs is typically larger, heavier and more intrusive, making it difficult to replace," explains Nathan Farr, OEM Sales Manager (USA), Dometic. "Our modular chillers feature an innovative space-saving 'box' design so they are easy to install and service. In fact, they can be moved in and out right through the doorways, so no disassembling is required."

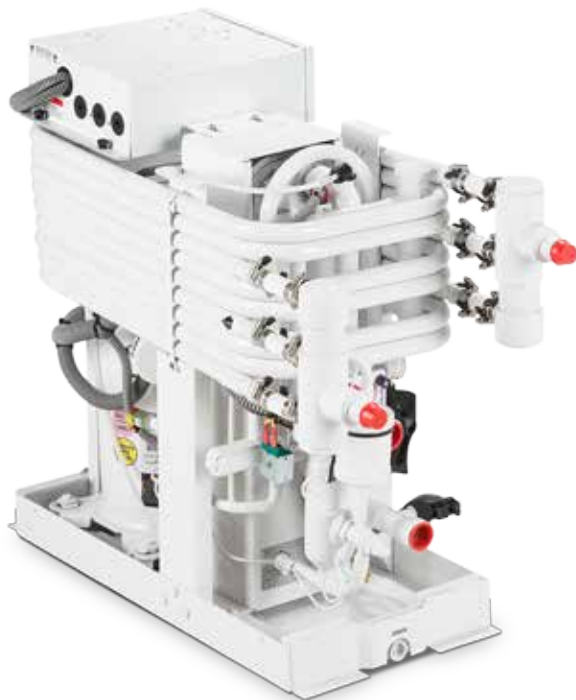
### MODULAR CHILLERS FIT THE BILL AND DOORWAYS

To directly address the greenhouse effect in the pilothouse and conserve valuable space in this confined area, Dometic supplied two AT36 air handlers for installation on the roof. These provided 72,000 BTUs of cooling without intruding into this hectic area of the vessel.

"We require the highest quality and proven-reliable air conditioning to provide a comfortable and pleasant working environment for our crew members, as well as cool sensitive electronic equipment on-board," said Joseph W. Dahl, General Manager of New Construction for Signet Maritime. "Dometic has proven to provide a wide range of HVAC solutions, which are further supported by exceptional technical expertise and customer service."

# CHILLED WATER AIR CONDITIONING

## MODULAR CHILLERS



Proven in thousands of marine installations, Dometic modular chillers range from 16,000 to 396,000 BTU/hr. 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 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 coaxial coil and shell-and-tube configurations.

The innovative Titan line of chillers have titanium condensers, which resist corrosion and erosion for much longer service life than industry-standard cupronickel condensers.

- Titanium condensers for longer service life
- Refrigerant gas circuit is contained within the chiller
- Allows more focused heat removal in interior spaces
- Reverse-cycle or electric immersion heating (select models)
- 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



### TWCX MODULAR TITANIUM CHILLERS

- Compact, enclosed design
- High performance and cost effective
- Reverse-cycle heating
- Chilled water flow switch
- Refrigerant high- and low-pressure switches
- Inlet and outlet circulated water temperature sensors
- Brazed plate coil evaporator and titanium seawater condenser for superior performance

#### PRODUCT SPECIFICATIONS

Capacity: 24,000 – 72,000 BTU/h  
 Power: 230V/60Hz, 220V/50Hz,  
 460V/60Hz, 380V/50Hz  
 Coolant: R410A



### MTDX MODULAR TITANIUM CHILLERS

- Installation flexibility and easy maintenance access
- Flexible hose improves alignment for seawater connections
- Seawater connections reinforced with stainless steel
- Removable seawater manifolds allow cleaning of condenser tubing
- Standard scroll compressor
- Titanium condenser resists corrosion

#### PRODUCT SPECIFICATIONS

Capacity: 24,000 – 120,000 BTU/h  
 Power: 230V/60Hz, 220V/50Hz,  
 460V/60Hz, 380V/50Hz  
 Coolant: R410A



### MTDVSP MODULAR CHILLER

- 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

#### PRODUCT SPECIFICATIONS

Capacity: 240,000 BTU/h  
 Power: 230V/60Hz, 220V/50Hz,  
 460V/60Hz, 380V/50Hz  
 Coolant: R410A



## MTS CHILLERS

- 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
- Filter drier keeps refrigerant oil clean and dry for long compressor life
- Optional electric-immersion heating
- Optional variable frequency drives smooth out compressor startup power demand

### PRODUCT SPECIFICATIONS

Capacity: 96,000 – 396,000 BTU/h

Power: 230V/60Hz, 460V/60Hz, 380V/50Hz

Coolant: R410A



## VARIABLE CAPACITY CHILLERS

- Variable capacity from 1 to 4 tons or 2 to 7 tons as thermal load changes
- Compact footprint
- Operates steadily at lower speeds to provide maximum efficiency
- Select from 3 user-adjustable amp limits: Econo, Standard, or Boost
- Electronic expansion valve for precise control of superheat

### PRODUCT SPECIFICATIONS

Capacity: 12,000 – 48,000 BTU/h  
24,000 – 72,000 BTU/h

Power: 208 - 230V/50 or 60Hz

Coolant: R410A



## MCGXLP MODULAR TITANIUM CHILLERS

- Fits into height-restrictive spaces
- Up to 25% more condenser area than similar units
- Spiral-fluted titanium condenser coil provides maximum heat transfer and corrosion resistance
- Removable PVC water headers resist corrosion and erosion
- Includes hot-gas bypass for heat mode operation in water temperatures as low as 40°F/4.4°C

### PRODUCT SPECIFICATIONS

Capacity: 36,000 – 180,000 BTU/h

Power: 230V/60Hz, 220V/50Hz,  
460V/60Hz, 380V/50Hz

Coolant: R410A



## MCGX MODULAR TITANIUM CHILLERS

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

### PRODUCT SPECIFICATIONS

Capacity: 24,000 – 180,000 BTU/h

Power: 230V/60Hz, 220V/50Hz,  
460V/60Hz, 380V/50Hz

Coolant: R410A

# 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.

- 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

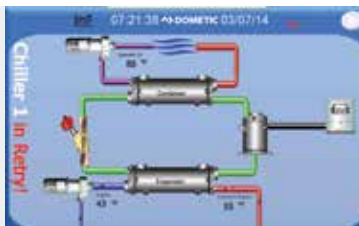


## SMART TOUCH CHILLER CONTROL

- Easy chiller management with intuitive, high-resolution touch-screen operation
- Touch-screen display available in 13 in. (330 mm) and 7 in. (178 mm) – can be installed in the electrical box or mounted remotely
- Networks to ship management controls via Modbus, CAN Bus, Ethernet, or BACnet
- Remote access through smart phone or computer via internet
- Increased analog inputs for detailed system monitoring
- Provides clear indications of current status, operational trends, animated real-time monitoring of the refrigeration circuit and more
- Alarm messaging via text or email
- Customizable home screen



Select chilled water temperature setpoint



Refrigerant circuit monitoring



Graphical trending data

## CHILLER ELECTRONICS CUSTOM ENCLOSURES

- Custom marine-grade enclosures to house and protect sensitive chiller electronics
- Used for Smart Touch and CWMC 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 Smart Touch high-resolution touch-screen or CWMC keypad/display

## SMART TOUCH INTEGRATED INTELLIGENCE (STIIC) CONTROL SOFTWARE

- Interactive management via smart phone
- Secure access from Dometic global technical support
- Plug-n-play networking software provides interactive solutions
- Network automatically expands as Dometic products are installed
- Easy-to-use interface, easy to configure
- Free app for your iPhone, smart phone, iPad, tablet or computer



# 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/hr.

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)



MCWLP 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)



MTC 5-Stage 300,000 BTU/h (25 ton)



MCWLP 6-Stage 360,000 BTU/h (30 ton)



STS 3-Stage 432,000 BTU/h (36 ton)



MTS 2-Stage 480,000 BTU/h (40 ton)



MCW 3-Stage 540,000 BTU/h (45 ton)



STS 3-Stage 540,000 BTU/h (45 ton)

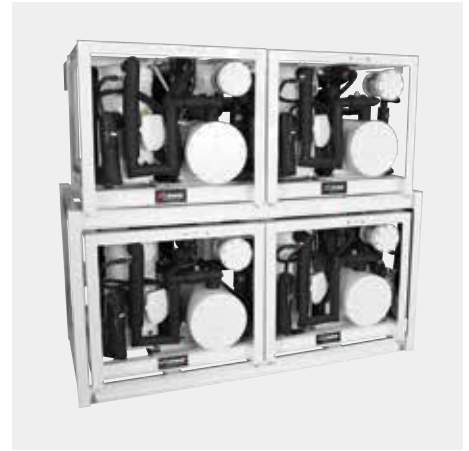




STSV 3-Stage 540,000 BTU/h (45 ton)



STS 4-Stage 576,000 BTU/h (48 ton)



MTSVLP 4-Stage 720,000 BTU/h (60 ton)



SCW 4-Stage 720,000 BTU/h (60 ton)



MCWLP 5-Stage 900,000 BTU/h (75 ton)



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

For vessels with very high capacity HVAC requirements, Dometic designs and builds custom 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 higher-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)

# CHILLED WATER AIR HANDLERS

Domestic 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.

- Configurations to fit any installation space
- Exceptional dehumidification
- Vibration-isolation mounting
- Optional flow control automatically balances circulated water throughout system
- Optional electric heat



## AHU 6-TON AIR HANDLER

- Does the work of multiple lower-capacity air handlers
- Saves time and installation space
- Innovative dual-coil design results in a more compact package
- Produces 2,500 CFM at 0.25" static pressure
- Quiet operation over a range of speeds
- Easily serviceable blower and water valve
- Vertical or horizontal discharge

### PRODUCT SPECIFICATIONS

Capacity: 72,000 BTU/h

Power: 115V/60Hz, 208 – 230V/50 or 60Hz



## GOLD SERIES (AU) AIR HANDLERS

- Rust-free composite drain pan with positive flow drain channels
- Single adjustment screw allows up to 270° blower rotation
- Reinforced drain holes and vibration-isolation mounts
- Braided kink-proof air bleeder hose
- Left- or right-oriented blower for installation flexibility
- Rotate the blower straight down for overhead installation
- Optional integrated Breathe Easy air purification

### PRODUCT SPECIFICATIONS

Capacity: 6,000 – 24,000 BTU/h

Power: 115V/60Hz, 230V/50 or 60Hz



## 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 exceptionally low profile
- Vibration-isolation suspension mounting hardware included
- High-velocity blowers (ATL-HV models)
- Optional DC WhisperCool blowers are ultra quiet yet strong enough to overcome high static pressure duct

### PRODUCT SPECIFICATIONS

Capacity: 6,000 – 36,000 BTU/h

Power: 115V/60Hz, 230V/50 or 60Hz



## 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)
- Optional DC WhisperCool blowers are ultra quiet yet strong enough to overcome high static pressure duct
- Optional electric heat or Breathe Easy air purification

### PRODUCT SPECIFICATIONS

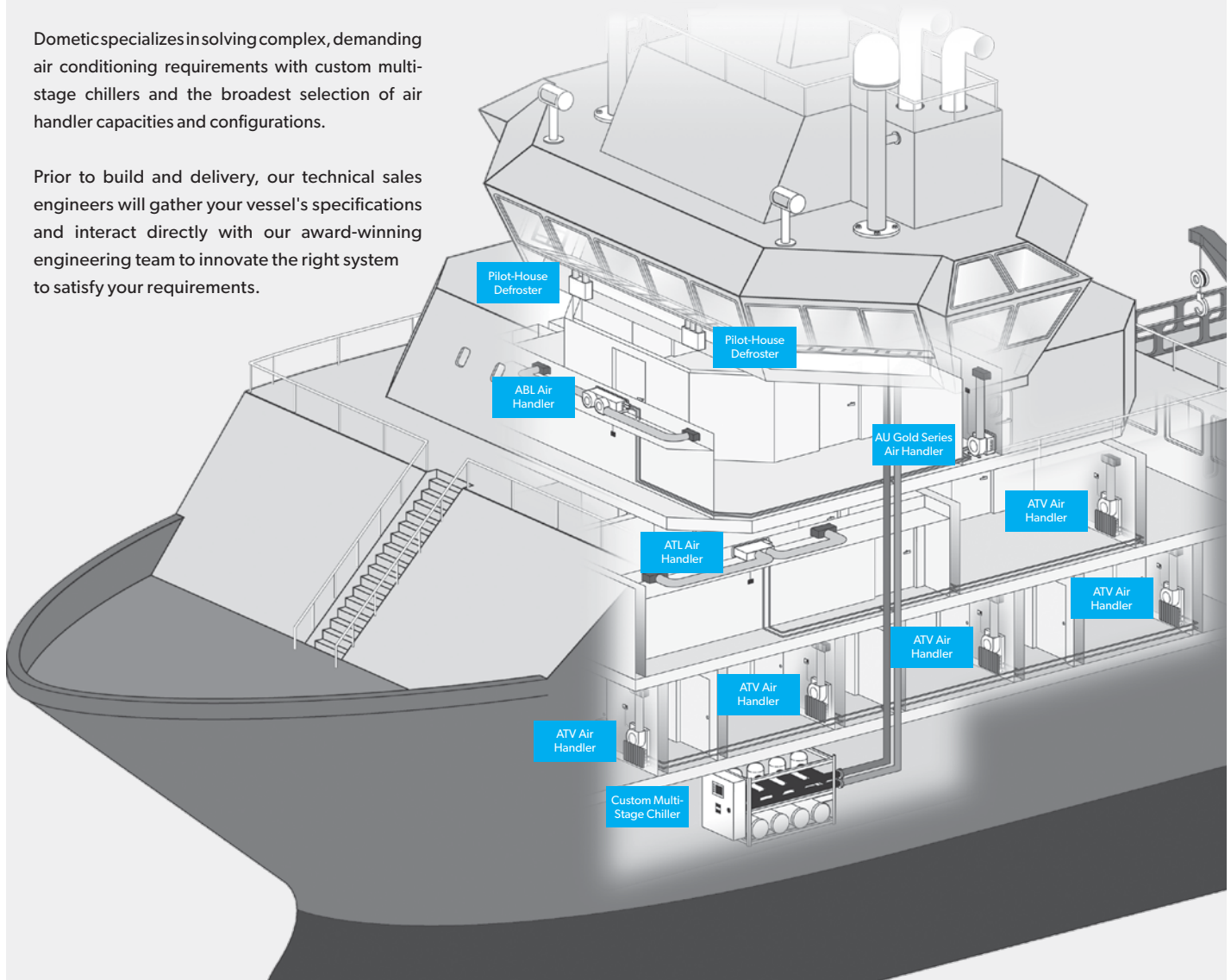
Capacity: 18,000 – 24,000 BTU/h

Power: 230V/50 or 60Hz

## CUSTOM CHILLED WATER SOLUTIONS

Dometicspecializes in solving complex, demanding air conditioning requirements with custom multi-stage chillers and the broadest selection of air handler capacities and configurations.

Prior to build and delivery, our technical sales engineers will gather your vessel's specifications and interact directly with our award-winning engineering team to innovate the right system to satisfy your requirements.



### ATV "4-PIPE" SLIM-PROFILE AIR HANDLERS

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

#### PRODUCT SPECIFICATIONS

Capacity: 6,000 – 24,000 BTU/h

Power: 115V/60Hz, 230V/50 or 60Hz



### 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 condensation
- Reduced height models available
- High-velocity blowers (ATV-HV models)

#### PRODUCT SPECIFICATIONS

Capacity: 6,000 – 24,000 BTU/h

Power: 115V/60Hz, 230V/50 or 60Hz

# SPLIT-GAS AIR CONDITIONING

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

Emerald series R410A 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 R417A condensers.

- Compact and extremely energy-efficient
- Central condensing unit reduces plumbing for easier installation
- Quiet evaporating units with vibration-isolation mounting
- Rust-free, composite drain pan (Emerald and TurboVap only)
- Optional electric heat



## 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 install time
- Vibration-isolation mounting hardware

### PRODUCT SPECIFICATIONS

Capacity: 6,000 – 72,000 BTU/h

Power: 115V/60Hz, 230V/60Hz, 220V/50Hz,  
460V/60Hz, 380V/50Hz

Coolant: R410A



## EMERALD TURBOVAP EVAPORATORS

- Rust-free composite drain pan has anti-slosh, "positive flow" drain channels for no spills and rapid removal of condensate
- Designed to be used with Emerald Series R-410A condensers
- Vibration-isolation mounts reduce noise and vibration
- Single adjustment screw for 270° of blower rotation

### PRODUCT SPECIFICATIONS

Capacity: 4,000 – 16,000 BTU/h

Power: 115V/60Hz, 230V/50 or 60Hz

Coolant: R410A



## EBE R410A EVAPORATING UNITS

- Compact design with high-velocity blower
- 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)

### PRODUCT SPECIFICATIONS

Capacity: 8,000 – 36,000 BTU/h

Power: 115V/60Hz, 208 – 230V/50 or 60Hz

Coolant: R410A



## EBDE R410A HIGH-CAPACITY EVAPORATING UNITS

- Variable-speed blower
- Horizontal or vertical air discharge models
- Drain pan has anti-slosh, anti-fungal lining
- Easy-to-replace air filter
- Integrated chassis with vibration-isolation mounts

### PRODUCT SPECIFICATIONS

Capacity: 30,000 – 72,000 BTU/h

Power: 230V/60Hz, 220V/50Hz

Coolant: R410A



## EBLE R410A LOW-PROFILE EVAPORATING UNITS

- Dual variable-speed, high-efficiency PSC blowers
- Optional return-air plenum for overhead installations
- Thermal expansion valve for optimal performance over a wide range of conditions
- Optional electric heat (EBHLE models)

### PRODUCT SPECIFICATIONS

Capacity: 12,000 – 36,000 BTU/h

Power: 115V/60Hz, 208 – 230V/50 or 60Hz

Coolant: R410A

# SELF-CONTAINED AIR CONDITIONING

Self-contained direct expansion air conditioning systems by Dometic 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.

- 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 reduces noise and vibration



## TURBO SERIES AIR CONDITIONING

- Up to 27 % more energy efficient
- Up to 21 % increased cooling capacity
- Compact design uses less space
- Vibration-isolation mounts reduce noise and vibration
- Rust-free composite drain pan
- Engineered to maximize the performance of R-410A refrigerant
- Available in 115V/60Hz and 230V/60Hz

### PRODUCT SPECIFICATIONS

Capacity: 6,000 – 16,000 BTU/h

Power: 115V/60Hz, 230V/60Hz, 220V/50Hz

Coolant: R410A



## 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

### PRODUCT SPECIFICATIONS

Capacity: 16,000 BTU/h

Power: 115V/60Hz, 230V/60Hz, 220V/50Hz

Coolant: R410A



## HIGHER-CAPACITY COMPACT 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

### PRODUCT SPECIFICATIONS

Capacity: 18,000 – 30,000 BTU/h

Power: 115V/60Hz, 230V/60Hz, 220V/50Hz, 380V/50Hz

Coolant: R410A



## FRAMED PACKAGE UNITS

- Sturdy 3/16 in. aluminum frame
- Reverse-cycle cooling/heating
- Cushioned mounts reduce noise and vibration
- Performs at full capacity in 90°F/32°C seawater
- Vibration-isolation mounting hardware reduces noise and vibration
- Vertical or horizontal configurations (vertical shown)
- Evaporating unit has vertical or horizontal blower discharge

### PRODUCT SPECIFICATIONS

Capacity: 36,000 – 72,000 BTU/h

Power: 230V/60Hz, 220V/50Hz, 460V/60Hz

Coolant: R410A

# AIR-COOLED AIR CONDITIONING

Dometic offers several types of rugged, maritized air conditioning systems designed for air-cooled applications. These units are designed for exterior installation and are engineered for exceptional resistance to harsh marine environments. Available in split and self-contained configurations, air-cooled systems are ideal for replacing non-maritized HVAC systems.

- Designed for exterior installation on rooftop, deck, or pedestal
- Air-cooled DuraSea chillers available
- Exterior components take up no interior space
- Corrosion-resistant components and coatings to withstand harsh nautical environments



## DURASEA ROOFTOP SELF-CONTAINED AIR CONDITIONER

- Drop-in cooling unit that requires no plumbing or ducting
- Rugged and strong but lightweight
- ElectroFin E-coat process for superior resistance to corrosion and UV damage
- Compressor stabilization to endure extreme motion

### PRODUCT SPECIFICATIONS

Capacity: 15,000 BTU/h (60Hz model)  
12,000 BTU/h (50Hz model)  
Power: 115V/60Hz, 220V/50Hz  
Coolant: R410A



## SSA16 PEDESTAL-MOUNTED SELF-CONTAINED AIR CONDITIONER

- Installed on rooftop or pedestal and ducted to interior spaces
- Originally engineered for jack boats
- Stainless-steel 304 enclosure
- Four-row high-efficiency evaporator coil with heresite coating for excellent corrosion resistance
- 1.5 kW electric heat

### PRODUCT SPECIFICATIONS

Capacity: 16,000 BTU/h  
Power: 230V/60Hz  
Coolant: R410A



## DURASEA SERIES DIRECT EXPANSION (DX) CONDENSING UNITS

- The only maritized air-cooled condenser
- Stainless-steel 304 enclosure
- Permanently lubricated fan motor with IP 54 protection
- High-efficiency copper tube and aluminum fin coil with dipped E-coating that exceeds 6,000-hour salt spray test
- Hermetically sealed scroll compressor with overload protection

### PRODUCT SPECIFICATIONS

Capacity: 36,000–120,000 BTU/h  
Power: 230V/60Hz, 220V/50Hz,  
380V/50Hz, 460V/60Hz  
Coolant: R410A



## DURASEA SERIES MODULAR CHILLER CONDENSING UNITS

- Maximum durability in the harshest nautical conditions
- Stainless-steel 304 enclosure
- Permanently lubricated fan motor with IP 54 protection
- High-efficiency copper tube and aluminum fin coil with dipped E-coating that exceeds 6,000-hour salt spray test
- Hermetically sealed scroll compressor with overload protection

### PRODUCT SPECIFICATIONS

Capacity: 36,000–180,000 BTU/h  
Power: 460V/60Hz  
Coolant: R410A

# CABIN CONTROLS

Dometic provides microprocessor-based, easy-to-use cabin controls for the precise monitoring and control of the temperature and humidity levels of interior spaces. The optional CAN Bus adapter allows remote control over multiple air handlers and evaporators – even self-contained air conditioners – via the ship-wide network.

- Automatic humidity control
- Cool-only, heat-only, and automatic modes plus multiple fan-speed control
- Internal circuitry is resistant to corrosion
- Optional CAN Bus adapter puts multiple cabin control on the vessel's network



## SMART TOUCH CABIN CONTROL

- The easiest to use, most intuitive marine cabin control
- Highly customizable displays enable personal preferences
- Intuitive icons and menus for easy use
- Interactive screens leads the user through startup and troubleshooting
- Programmable scheduler allows startup and shutdown times or temperature changes
- Faults and service alerts display on screen
- Links to manuals and other help resources
- CAN bus compatible



## PASSPORT I/O CONTROL SYSTEM

- Automatic humidity control
- Cycle fan with compressor or continuous fan operation
- Compressor time delay staging for multiple unit applications
- Cool-only, heat-only, dehumidify, and auto modes
- Compressor fail-safe protection
- Programmable de-icing cycle
- Optional CAN bus puts cabin control on ship-wide network
- Passport I/O system works with three keypad/displays: Elite, Passport Compact, and the new Smart Touch Cabin Control



## Q-LOGIC CONTROL SYSTEM

- 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 CAN bus adapter puts cabin control on ship-wide network
- Optional electric heat package
- Q-Logic system works with the Qht and Q3 keypad/displays

# AIR CONDITIONING ACCESSORIES

## SMARTSTART II SOFT STARTER FOR SINGLE-PHASE COMPRESSORS

- 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
- Fault-code LED provides troubleshooting assistance
- Inexpensive, small, and lightweight

### PRODUCT SPECIFICATIONS

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



## SPECIAL APPLICATIONS

Many workboats have unique needs requiring specialized equipment. Trust Dometic 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.

- 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



### RADOME ENVIRONMENTAL CONTROL UNIT

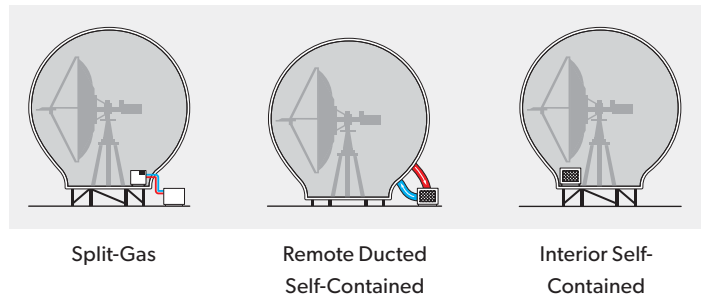
- Keeps sensitive domed electronics cool
- Air cooled – no plumbing required
- Durable corrosion-resistant coating on interior components
- Raised lance fin and rifled tubing for maximum capacity
- Solid-state digital control provides reliable temperature and humidity control

#### PRODUCT SPECIFICATIONS

Capacity: 16,000 BTU/h

Power: 115V/60Hz, 230V/60 Hz, 220V/50Hz

Coolant: R417A



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
- Rotatable blower

#### PRODUCT SPECIFICATIONS

Capacity: 18,000 BTU/h

Power: 220V/50 Hz

Coolant: R410A



### 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 and ultra-quiet WhisperCool blowers available
- Electric heat with two-stage overload
- Heater assembly accessible from the top or side

#### PRODUCT SPECIFICATIONS

Capacity: 18,000 – 36,000 BTU/h

Power: 115V/60Hz, 230V/60Hz, 220V/50 Hz





## 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



## 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

### PRODUCT SPECIFICATIONS

Power: 115V/50 or 60Hz, 230V/50 or 60Hz



## 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

### PRODUCT SPECIFICATIONS

Power: 115V/50 or 60Hz



## 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

### PRODUCT SPECIFICATIONS

Capacity: 5,120 BTU/h (heat)

Power: 115V/60Hz, 230V/60Hz



# VENTI

# LATION

# BREATH EASY AIR PURIFIERS

Dometic's award-winning Breathe Easy air purifiers use innovative photocatalytic nano-mesh technology and non-ozone-producing ultraviolet (UV) light to stop on-board odors and enhance air quality.

Two configurations are offered: In-duct and portable. In-duct models work silently within the A/C duct and do not significantly decrease air flow velocity. The compact portable model is effective in areas up to 500 sq. ft.

(46 sq. m) and includes worldwide AC adapter with plugs and 12V DC power plug.

- Eliminate unpleasant on-board odors
- Uses an intense ultraviolet light that produces no harmful ozone
- Enhances air quality
- Cleaner air may lessen allergy and asthma symptoms

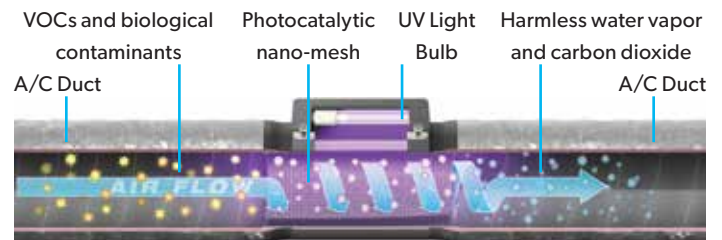


## BREATHE EASY IN-DUCT AIR PURIFIER

- Stops odors
- Will not significantly decrease air flow velocity
- Silent operation
- Up to 98% reduction in volatile organic compounds
- Up to 99.9% reduction in bacteria, fungi, mold, and pollen
- Sizes for common duct diameters
- UV bulb is easy to replace

### PRODUCT SPECIFICATIONS

Power: 115V/60Hz, 230V/60 Hz, 220V/50Hz



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.

3. Chemical and biological impurities enter the in-duct air purifier through the A/C duct.



## BREATHE EASY PORTABLE AIR PURIFIER

- Stops odors
- Two internal fan speeds
- Quiet operation
- Up to 96% reduction in diesel fumes, acetone, benzene, formaldehyde, and other volatile organic compounds
- Up to 99% reduction in bacteria, fungi, mold, and pollen
- Worldwide AC power adapter with plugs and 12V DC power plug
- UV bulb is easy to replace
- Can be mounted vertically on a wall

### PRODUCT SPECIFICATIONS

Coverage: Effective up to 500 sq ft (46 sq m)

Power: 12V DC, 115V/60Hz, 230V/60Hz, 220V/50Hz

# SHIP-WIDE VENTILATION SYSTEMS

Dometic ship-wide ventilation systems 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 specializes in custom components and integrated systems.

- Fans and blowers provide cooling and/or combustion air
- High-strength PPG glass-reinforced polyamide fan-blades
- Mist eliminators keep salt spray and mist out of engine spaces
- Smoke and fire dampers available in marine-grade aluminum or stainless steel



## 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



## PRESSURE AND 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



## 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



## 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

A dark, moody photograph of a rocky coastline. The rocks are jagged and layered, extending from the left side of the frame towards the center. The ocean is visible on the right, with some white foam from waves crashing against the rocks. The sky is a dark, overcast grey. The text 'FOO BEVE' is overlaid in a large, bold, white, sans-serif font on the right side of the image.

**FOO  
BEVE**



# D & RAGE

# REFRIGERATION

Dometic offers built-in and portable refrigeration solutions built to withstand the rigors of marine use. CRX built-in refrigerators feature a removable full-width freezer compartment to transform the unit into a larger-capacity refrigerator-only or freezer-only. Compact drawer-opening refrigerators offer smart cooling for niche spaces. Portable CF coolers can operate as a refrigerator or freezer with temperatures down to 0°F (-18°C).

- Built-in and portable refrigeration
- 12/24V DC or 110/220V AC operation
- Award-winning designs
- Rugged and reliable construction
- New thermoelectric Eskimo Cup keeps open drinks refrigerator-cold on your boat



## CRX SERIES BUILT-IN REFRIGERATORS WITH REMOVABLE FREEZER COMPARTMENT

- Patented removable freezer compartment transforms the unit into a larger-capacity refrigerator-only or 17°F (-8°C) freezer-only
- Speed-controlled compressor is more efficient and reduces noise
- Bright LED illumination
- Flat electronic control panel
- High-performance tube and fin condenser
- Available in three sizes from 1.6 to 3.7 cu. ft.

### PRODUCT SPECIFICATIONS

Coverage: 3 sizes from 1.6 to 3.7 cu. ft.

Power: 12/24V DC, 100 - 240V AC





## CD & CRD BUILT-IN DRAWER REFRIGERATORS

- Easy pull drawer opening on ball-bearing slides
- Removable freezer compartment allows additional storage for items needing refrigeration only (CRD-050)
- CD-020 and -030 turns any unused nook into a practical refrigerator
- Recessed handle provides smooth, sleek finish
- Continuously variable thermostat

### PRODUCT SPECIFICATIONS

Coverage:	CD-020: 0.71 cu. ft.
	CD-030: 1.60 cu. ft.
	CRD-050: 1.65 cu. ft.
Power:	12/24V DC



## 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

### PRODUCT SPECIFICATIONS

Coverage:	7 sizes from 0.7 to 3.8 cu. ft. (20 to 108 liters)
Temp:	0° to 50°F (-18° to 10°C)
Power:	12/24V DC, 100 - 240V AC



## ESKIMO CUP REFRIGERATED CUP HOLDER

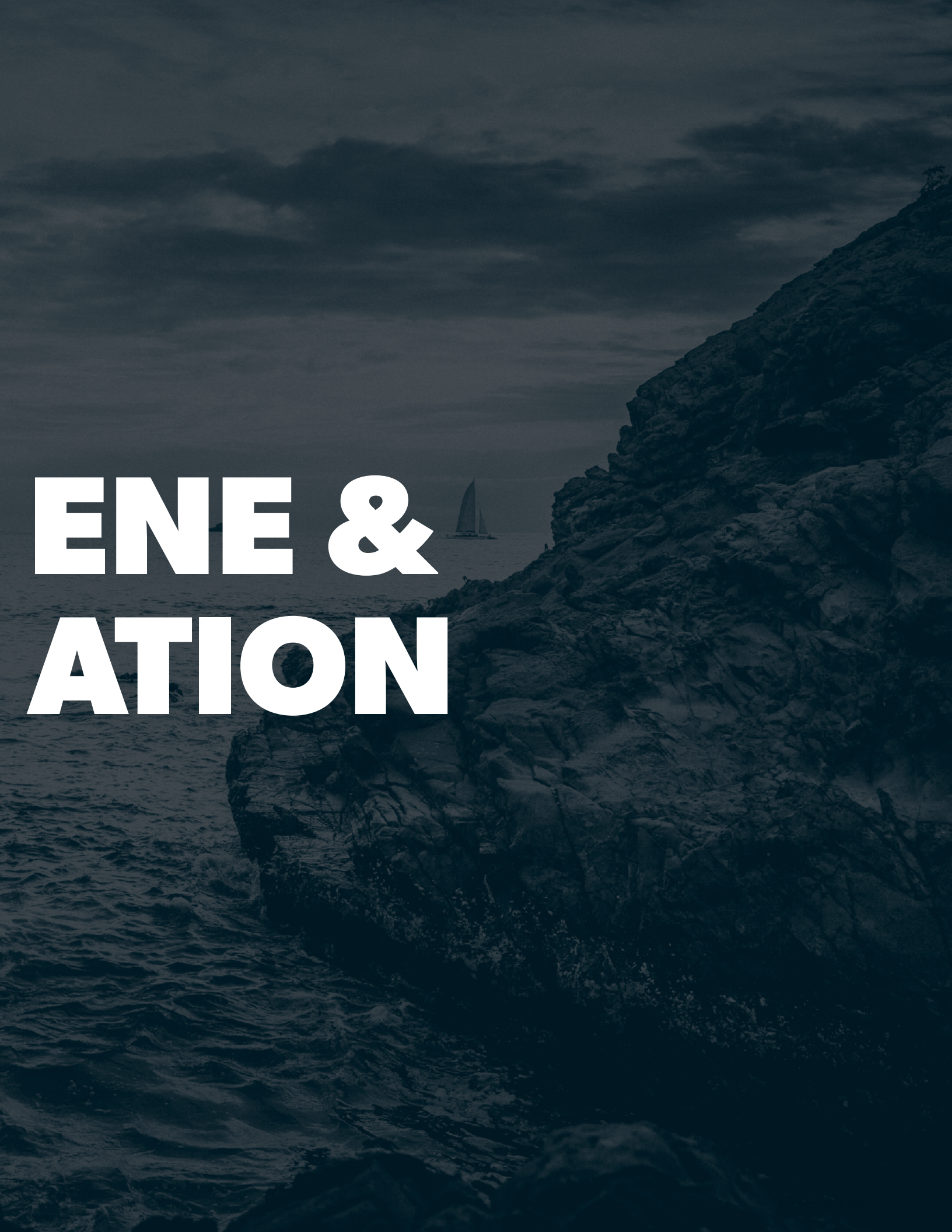
- Keep drinks refrigerator-cold
- Replaces most standard cup holders
- Holds bottles or cans
- Polished marine-quality 316 stainless-steel trim ring
- Two blue LED interior lights
- Mounts into surfaces of various thicknesses

### PRODUCT SPECIFICATIONS

Power:	12V DC
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# **HYGI SANIT**



# ENE & ATION



## **SOUTH BOATS TRUSTS MASTERFLUSH TOILETS TO WITHSTAND CONSTANT & HEAVY USE AT SEA**

### **HARSH CONDITIONS REQUIRE RUGGED, HOME-STYLE TOILETS**

Based on the Isle of Wight, UK, South Boats Special Projects Ltd. are the largest builders of offshore wind-farm support vessels in the world. With 66 vessels in service or in build within the region and with 14 company operators, it's imperative that the company use a trusted supplier for premium on-board systems.

When it comes to the on-board environment of a workboat, the provision of efficient and reliable sanitation systems is important. Ideal marine heads should effectively macerate waste; withstand constant use in a harsh marine environment, while also providing comfort and ease of use for the crew.

### **MODERN, ROBUST TOILET SYSTEMS SAVE WATER & POWER**

Already familiar with Dometic's engineering capabilities and product reliability from specifying air conditioning systems for their vessels, South Boats decided to use Dometic for their toilet systems, also. Seeking a reliable toilet system that would offer both comfort and efficiency, Dometic's MasterFlush macerating toilets were the natural choice.

With a compact design and small footprint, the Dometic 8600 MasterFlush toilet uses 64% less power and 33% fewer amps than competing models. In addition, it can save fresh water with a flush setting which adds only a small amount of water to the bowl. This 'rough-sea' flush feature also eliminates spillage from the toilet during turbulent conditions. The 8600 toilet has through-floor or through-wall discharge options.

The 18-blade stainless-steel macerator turbine delivers up to 2,500 rpm to grind waste into a pumpable effluent with no clogging. Effluent is discharged to the holding tank which can be installed up to 98 ft. (30 m) away.

### **DOMETIC SOLUTIONS DELIVER HIGH PERFORMANCE AT SEA**

"Dometic offers a wide range of systems which they have been able to customize in accordance with our specific requirements," comments Chris Cheverton, Purchasing Manager, South Boats.

"We've had great success with Dometic's air conditioning systems so we recently expanded the scope of supply to include the company's modern and robust macerating toilets. The MasterFlush systems are quick and easy-to-install and provide efficient, high-performance sanitation solutions for the crew on-board."



## SUPPLYING A SOPHISTICATED TOILET SYSTEM SOLUTION TO THE US NAVY'S MOOSE BOATS

### THE CHALLENGES

The United States Navy asked Moose Boats, a manufacturer of vessels for law enforcement, port security, fire and rescue, and the military, to explore a more sophisticated, plumbed solution to their existing portable heads requiring manual discharge.

- Smaller patrol vessels like Moose Boats typically have limited capacity for a toilet system with holding tank.
- Exceptionally small head space.
- Moose Boats patrol in demanding environments, requiring rugged and durable equipment.

### THE SOLUTION

Dometic's VacuFlush technology was chosen because of its reliability and superior performance. VacuFlush adds value to a manufacturer whose reputation depends on the reliability of its boats and all on-board systems.

"Dometic's VacuFlush toilet systems have proven to offer exceptional functionality aboard, complementing our vessels perfectly," said Abbie Walther, VP of Moose Boats.

VacuFlush provides far more functionality than competing low-cost systems while offering long-term benefits such as the reduction of odors and exceptional water conservation.

- Exceptionally low water consumption (1 pint per flush).
- Pedal-operated toilet draws a mere 6 amps per flush (using 12 V DC).
- Dometic offers a wealth of experience and specialized know-how to the marine market

### VACUFLUSH LOW-WATER TECH TIP

"VacuFlush water consumption is less than one gallon per person per day, allowing more days of usage between pump-outs," says Nelson Frolund, sanitation applications engineer for Dometic. "This also allows the use of fresh water for flushing, thereby eliminating the sulfurous odor often associated with microbe-laden seawater."



# SANIT



# ATION

CLIMATE

FOOD & BEVERAGE

HYGIENE & SANITATION

# VACUFLUSH TOILET SYSTEMS

VacuFlush technology uses stored vacuum energy to clear the bowl instantly and discharge 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.

- Odor-free, clog-free VacuFlush 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 (using 12 V DC)
- Fresh water use reduces maintenance and odors



## 5000 SERIES VACUFLUSH TOILETS

- Powerful, foot-pedal-activated vacuum flush
- Ultra low water consumption — only 0.13 US gal. (0.5 l) per flush
- Small footprint fits in almost any head compartment
- Full-size residential wood seat
- Deep, household-size bowl

### PRODUCT SPECIFICATIONS

Power: 12/24V DC  
Height: Low Profile, Medium Height, Standard Height  
Discharge: Through-Floor Discharge, Above-Floor Discharge



## 140 SERIES VACUFLUSH TOILETS

- Compact size fits small head compartments
- Powerful, foot-pedal-activated vacuum flush
- Ultra low water consumption — only 0.13 US gal. (0.5 l) per flush
- Small footprint fits in almost any head compartment
- Premium-strength wood seat
- Pedal lock keeps flush ball open for service or holding tank pump-out

### PRODUCT SPECIFICATIONS

Power: 12/24V DC  
Height: Medium Height  
Discharge: Through-Floor Discharge, Above-Floor Discharge

## 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

### PRODUCT SPECIFICATIONS

Power: 12/24V DC

## 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

### PRODUCT SPECIFICATIONS

Power: 12/24V DC



# MASTERFLUSH TOILET SYSTEMS

Dometic's industry-leading MasterFlush toilet system employs a high-efficiency 18-blade macerator turbine to pulverize waste for no-clog performance. 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.

- 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



## 7100 & 7200 SERIES MASTERFLUSH TOILETS WITH ORBIT BASE

- Full 360° bowl-to-base rotation allows virtually limitless positioning to accommodate small spaces and diverse plumbing layouts
- Small footprint to fit in tight spaces
- Freshwater and raw water flush models available
- Standard dual-function "add water/flush" switch; optional triple function "flush/add water/dry bowl" switch (freshwater flush models only)
- Draws only 20 amps at 12VDC, or 10 amps at 24VDC

### PRODUCT SPECIFICATIONS

Power: 12/24V DC

Height: Medium Height and Low-Profile Height

Discharge: Through-Floor Discharge, Above-Floor Discharge



Dometic's 7100 and 7200 series macerating toilets with ORBIT base can be positioned in any head configuration and will accommodate diverse plumbing layouts.



## 8100 SERIES MASTERFLUSH TOILETS

- All-ceramic construction with enameled wood seat for premium comfort
- Small footprint fits in almost any head compartment
- Standard and low-profile heights
- Through-floor and through-wall discharge options
- "Dry Bowl" flush option drains bowl for rough sea operation
- Convenient electronic flush toggle switch panel

### PRODUCT SPECIFICATIONS

Power: 12/24V DC

Height: Low Profile, Standard Height

Discharge: 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.

- 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



### 9300 & 9400 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 optional DFS flush switch
- Full-tank shutdown option prevents overfilling of the holding tank

#### PRODUCT SPECIFICATIONS

Power:	12/24V DC
Height:	Standard Height
Discharge:	Through-Floor Discharge Above-Floor Discharge

# GRAVITY-FLUSH TOILET SYSTEMS

Dometic gravity-flush toilet systems offer excellent water efficiency. Self-contained toilet and holding tanks available, as well as custom systems.

- Excellent water efficiency



## 711-M28 SELF-CONTAINED GRAVITY-FLUSH TOILETS

- Ceramic bowl and solid seat for home-like comfort
- Integrated 9-gal. (36-liter) high-strength, long-lasting holding tank
- As little as 1 pint (0.4 liter) of water per flush
- Foot-pedal flush requires no electric power
- Integral vacuum breaker protects water supply

### PRODUCT SPECIFICATIONS

Height: Standard Height



## 4410N CUSTOM GRAVITY-FLUSH TOILET SYSTEM

- Custom raw-water-flush system for naval and commercial vessels
- 115V AC operation through specially engineered control module
- Clog- and corrosion-proof water valve system lowers maintenance costs
- All-ceramic, heavy-duty toilets with electronic gravity-flush
- Integrates with macerator-transfer pump to clear drain pipes when flushing
- Toilet and control module constructed and field-tested to withstand constant demands

## HOLDING TANK SYSTEMS

Complete your sanitation system with Dometic's HTS line of corrosion-proof, leak-proof, and odor-proof holding tanks. With a wide range of sizes and capacities, HTS systems feature top-mounted fittings and dip tube discharge plumbing to prevent leaks. Enjoy accurate, continuous tracking of tank capacities with DTM series of tank monitors. Eliminate tank vent line odors with the Dometic Eco Holding Tank Vent Filter, which removes odors 2.4X better than the closest rated competitor's filter.

- Standard models (HTS) and built-in discharge pump (HTS-T)
- Corrosion-proof, leak-proof, and odor-proof
- "Diptube-style" discharge fittings for thorough pump-out
- Easy to install – no solvent-bond connection required
- Capacities from 10 gallons (38 liters) to 80 gallons (302 liters)
- ISO/USCG compliant



## HTS SERIES STANDARD HOLDING TANKS

- High-density polyethylene tank construction is corrosion-proof, leak-proof, and odor-proof
- "Diptube-style" discharge fittings for thorough pump-out
- All components pre-plumbed and pre-tested
- Available with or without discharge pump
- No solvent-bond connections required for easy installation
- Tank monitor systems indicate tank levels

### PRODUCT SPECIFICATIONS

Power: 12/24V DC



## DOMETIC ECO HOLDING TANK VENT FILTER

- Improved malodorous gas filtration
- Uses 55% less plastic than previous Dometic vent filter cartridge but fits the same space and brackets for easy retrofitting
- Earth-friendly, recyclable plastic components



# WATER

# MAKERS

# DOMETIC SEA XCHANGE WATERMAKERS

Dometic Sea Xchange systems use reverse osmosis to turn seawater into fresh, drinkable water. Keep your water tanks filled to capacity without having to load and transport extra water supplies. Built with high-quality components, including high-rejection seawater membranes, a compact Sea Xchange system takes up minimal space on-board and is designed for continuous high performance.

- Turn seawater into fresh, drinkable water
- Keep fresh-water tanks filled to capacity without transporting extra water supplies
- Built with high-quality components
- 2-in-1 modular or compact frame design
- Remote monitoring via Internet and smartphone or tablet



## XZ SERIES SEAWATER & FRESHWATER REVERSE-OSMOSIS SYSTEMS

Purify seawater and dock water automatically with a single, compact machine. The XZ is the only system that combines the benefits of a watermaker and freshwater reverse-osmosis (RO) purification system for ultra-pure water onboard. The two purification systems share one frame and one controller. A single unified XZ system reduces space requirements, cuts installation time in half, and reduces the cost of buying two separate systems.

- Purifies dockside water and raw seawater in a single compact machine
- One-touch fully automatic system with mechanical redundancy
- Integrated sound shield reduces noise of HP pump
- Remote operation via Internet and Dometic's embedded Smart Touch Integrated Intelligence Control (STIIC) software
- Available in four sizes that produce the following volumes of purified water from saltwater/freshwater: 1,200/2,000 gpd (4,542/7,571 lpd), 1,800/2,000 gpd (6,813/7,571 lpd), and 2,200/3,000 gpd (8,328/11,356 lpd)



### EASY TO USE

Color touchscreen with graphical display for easy operation



### LESS MAINTENANCE

High-capacity filters are changed less frequently



### LESS NOISE

Integrated sound shield minimizes pump motor noise

## XZ-HD SERIES SEAWATER & DOCK WATER SYSTEMS

Purify seawater and dock water automatically with a single, compact machine. Only Dometic Sea Xchange XZ-HD systems combine the benefits of an onboard watermaker (seawater desalinator) and a freshwater reverse-osmosis (RO) purification system for ultra-pure water onboard.

- Color touchscreen with graphical display for easy operation
- High-capacity filters are changed less frequently
- Integrated sound shield minimizes pump motor noise

### PRODUCT SPECIFICATIONS

Power: 230V/60Hz  
Production: 4,200 GPD



## DOMETIC SEA XCHANGE CX SERIES COMMERCIAL-GRADE WATERMAKERS

- Commercial-duty aluminum powder-coated frame
- 316SS boost pump with washdown duty motor
- Iron removal/particulate removal media filtration incorporated on watermaker skid
- Minimum of 160 sq. ft. of commercial prefiltration with 316SS prefilter housing
- 316SS high-pressure ceramic plunger pump (positive displacement pump)
- 8-in. diameter spiral wound membranes with FRP pressure vessels
- 316SS high-pressure piping and tubing

### PRODUCT SPECIFICATIONS

Power: 230V/60Hz  
Production: 8,000 – 40,000 GPD

## ZTC SERIES FULLY AUTOMATIC FRESHWATER SYSTEMS

Dometic Spot Zero removes 95-99% of total dissolved solids (TDS) from any dockside or onboard water supply. The result is soft, pure water for a spot-free wash down without the need to hand dry.

- Purifies dockside water and water from an onboard desalination system
- Removes 95-99% of TDS
- Extends wax and paint life
- Interactive management on smart phone, tablet, or computer via the Internet

### PRODUCT SPECIFICATIONS

Power: 115V/60Hz, 230V/60Hz  
Production: 2,000 – 3,000 GPD

## DOMETIC SEA XCHANGE XTC WATERMAKERS

- The only fully automatic watermaker with mechanical redundancy
- The only watermaker with remote monitoring via Internet and smartphone
- 7 in. (178 mm) color touchscreen display (NEMA 4X)
- 2-in-1 modular or compact frame design
- 316 stainless-steel high-pressure pump
- 316 stainless-steel booster pump and high-pressure pump motor shafts
- TEFC motor with thermal motor protection
- Modbus networking available standard

### PRODUCT SPECIFICATIONS

Power: 230V/50 or 60Hz  
Production: 600 – 2,200 GPD

Mobile living made easy.



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