



# Mobile climate solutions

Marine climate systems

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## Perfect temperatures on board

### Climate solutions for smaller boats and yachts

Exciting days at sea are always a pleasure. Only an air conditioner can make that pleasure even more enjoyable. They can easily be retrofitted into your boat or yacht. Treat yourself to the same high quality which the vast majority of leading recreational boat manufacturers install in their yachts.

The know-how and experience which we have gained from fitting original equipment is used to simplify the retrofitting of the climate systems. These work with highly-efficient, environmentally-friendly technology,

are comfortable to use and easy to install. They cool or heat the cabin as required, and at the same time filter and dehumidify the air.

Dometic MCS climate systems for retrofitting are available in two performance categories, with 5,000 or 15,000 BTU/h. You can find out which model best suits your yacht using the overview on the following page.

## Complete climate systems for retrofitting

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It's all here: Air ducts, seawater pump, electrical box, control panel... All components required for installing and using your compact MCS5 and MCS15 systems are included in the delivery kit. All A/C components are mounted on a single chassis – this saves both space and money. The ideal retrofit solution for smaller yachts and boats.

### Dometic MCS 5 / MCS 15



MCS 5 / MCS 15

### Dometic BreatheEasy



Dometic BreatheEasy (Air purifier)

## How to select unit size

Selecting the right climate system for your application depends on the size of the room to be air-conditioned and the part of the boat in which it is situated. A cabin below deck will require less capacity per square metre of room area than an upper-deck cabin with large windows directly exposed to the sun. Our calculations assume an average headroom of two metres and ambient temperatures of 20°C to 35°C.

Maximum air-conditioned room size (at ambient temperatures of 20 – 35°C)

	Below deck (no windows)	Mid deck (small windows)	Above deck (large windows)
Dometic MCS 5	8 m <sup>2</sup>	5 m <sup>2</sup>	4 m <sup>2</sup>
Dometic MCS 15	23 m <sup>2</sup>	15 m <sup>2</sup>	12 m <sup>2</sup>

## OEM competence

### Over 50 years of experience in marine climate control

When it comes to original fittings for boats and yachts, leading manufacturers all over the world opt for Cruisair and Marine Air brand air conditioners. Both are manufactured and supplied by Dometic GROUP. Cruisair has proven itself to be highly innovative, leading the world in yacht climate technology for half a century. Marine Air revolutionised the market in the 1970s with the development of self-contained air conditioners. Considering this background, it's no wonder that Dometic MCS climate systems have emerged as a retrofit solution with the same high standards of quality as original equipment.







## Perfect climate in a complete set

**Compact, seawater-cooled, installer-friendly: the new Dometic marine climate systems have been designed for retrofitting.**

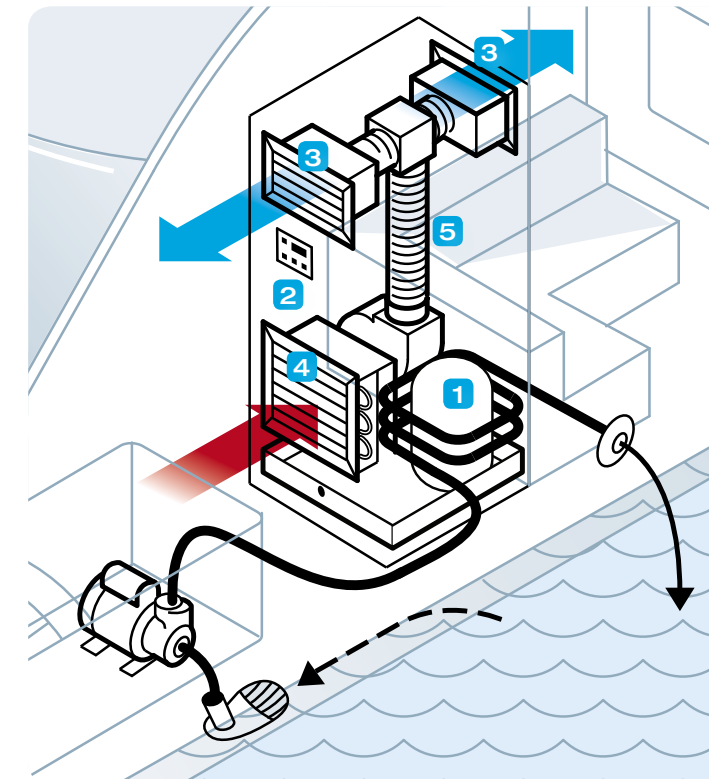
Depending on the size of the cabin you can choose between a 5000 or 15000 BTU/h model. If you opt for the MCS 15 and add the dual air distribution kit you can condition two cabins at the same time. Dometic marine climate systems also provide heating. Efficient heat pump technology makes sure it works at water temperatures as low as 6°C. Additionally, the air conditioner dehumidifies the air.

The high-velocity fan generates a powerful and quiet air flow. The blower outlet can be adjusted horizontally and vertically, depending on the installation conditions.

An easy-to-use control panel for all essential functions adds the finishing touch to your comfort climate solution.

- Powerful system, cooling and heating combined
- Small, compact and space-saving
- Complete package solution with all installation fittings and control elements included
- 2 models with a capacity of 1500 or 4400 watts [5000 or 15000 BTU/h]
- Integrated air filter, easy to clean and replaceable
- Compact and user-friendly control panel
- Optional add-on kit for directing the air-flow into two separate cabins [for MCS 15]
- High-quality return air and supply air grills

## How it works and how it's installed



**The Dometic MCS5 and MCS15 marine climate systems work on the heat pump principle, so they can be used for cooling as well as for heating.**

As with all air conditioners, they operate based on the transfer of heat. In cooling mode heat is extracted from the cabin air, transferred to the refrigerant and then released into the seawater. In heating mode, the cycle is simply reversed – from the seawater into the cabin. It even works in water temperatures as low as 6°C.

The diagram on the left shows a typical installation layout for the Dometic MCS15. This unit allows two cabins to be air conditioned or heated by ducting the air flow in two directions with the optional air distribution kit.

- 1 MCS15 A/C unit
- 2 Control panel
- 3 Supply air grill
- 4 Return air grill
- 5 Air duct, insulated

## The digital control panel

**Easy to use: the main functions of the digital multi-function control are self-explanatory.**

All parameters are conveniently set at the touch of a button: the fan speed is variable between 1 to 6 or fully automatic mode, the temperature variable in one-degree increments. The digital display shows the current or set point temperature in the cabin. Note: When it comes to installation, the best place for the control panel is slightly above mid-height of the cabin, an area with good air circulation, where the sensor can best sense the average temperature.

- Fan speeds: 6/automatic mode
- High-quality, elegant design
- Display illumination can be dimmed to keep cabin dark at night
- Factory-preset temperature range – can be adjusted to individual needs
- Dehumidification mode – automatically dehumidifies the room air when the boat is not in use [requires power to unit]



- 1 ON / OFF
- 2 LED cooling mode  
LED manual blower speed set  
LED heating mode
- 3 Select fan speed 1 to 6, A = automatic mode
- 4 Temperature setting: 1 tap = 1 degree down
- 5 Temperature setting: 1 tap = 1 degree up
- 6 Digital display
- 7 Sensor

**Dometic MCS5 / MCS15**

Complete climate system with 1500 or 4400-watt cooling capacity for 230-volt operation

2.12



	MCS5	MCS15
<b>Cooling capacity</b>	5000 Btu/h / 1500 watts	15000 Btu/h / 4400 watts
<b>Heating capacity</b>	1500 watts	4400 watts
<b>Power consumption in cooling/heating mode</b>	500 watts / 660 watts	1000 watts / 1300 watts
<b>Input voltage</b>	230 volts AC [220 to 240 volts] /50 Hz	
<b>Power consumption in cooling/heating mode</b>	2.2 A/2.9 A	4.5 A/5.8 A
<b>Required circuit protection [harbour]</b>	min. 7 A, max. 10 A, delay fuse	min. 11 A, max. 20 A, delay fuse
<b>Starting current</b>	up to 11 A	
<b>Number of blower speeds</b>	6/automatic	
<b>Temperature range [preset]</b>	18°C to 30°C	
<b>Thermostat temperature control</b>	yes	
<b>Refrigerant</b>	R417a	
<b>Dimensions [W x H x D]</b>		
A/C unit	226 x 279 x 452 mm	260 x 340 x 550 mm
Electronic control	165 x 222 x 67 mm	165 x 222 x 67 mm
<b>Weight</b>	18 kg	28 kg
<b>Quality features</b>	Complete set including seawater components, air duct and installation fittings, space-saving self-contained air conditioner, high-quality, corrosion-resistant materials	
<b>Test mark</b>	CE	

**Scope of delivery:** A/C unit, electrical box and control panel, seawater pump, seawater strainer, air ducts, supply air and return air grills, seawater hose, through-hull fittings, fixing material, fittings, valves

Product	Ref. No.
Dometic MCS5	9108548387
Dometic MCS15	9108548391



Cooling and heating



For 230 V AC

Perfect climate in a complete set

Compact, space-saving A/C unit

Efficient seawater cooling system

Environmentally friendly refrigerant

**Dometic MCS Accessory**

Air distribution kit

2.12



<b>Function</b>	This add-on kit for the Dometic MCS15 can be used to cool or heat two cabins simultaneously. Due to the flexible design it can be easily adapted to individual mounting conditions.	
<b>Dimensions [inner Ø x L]</b>		
Air duct	100 mm x 3.80 m	
<b>Scope of delivery:</b>	air duct, closable supply air grill, Y-piece	
<b>Product</b>	<b>Ref. No.</b>	
Air distribution kit	9108549923	

Low-cost two-cabin solution

**Reduced starting current**

The Dometic MCS 15 air conditioner has real power – and therefore also has a higher compressor starting current. This can however be reduced by up to 65% using the new Dometic SmartStart soft starter. It makes starting absolutely

problem-free even at moorings with low electrical circuit protection. This compact solution can be quickly and easily integrated into new or existing systems.

**Dometic SmartStart**

2.12



<b>Function</b>	Soft starter for reducing the starting current	
<b>Dimensions [W x H x D]</b>	127 x 76 x 51 mm	
<b>Product</b>	<b>Ref. No.</b>	
Dometic SmartStart	9108680633	

**NEW**

Soft starter

**Dometic BreatheEasy**

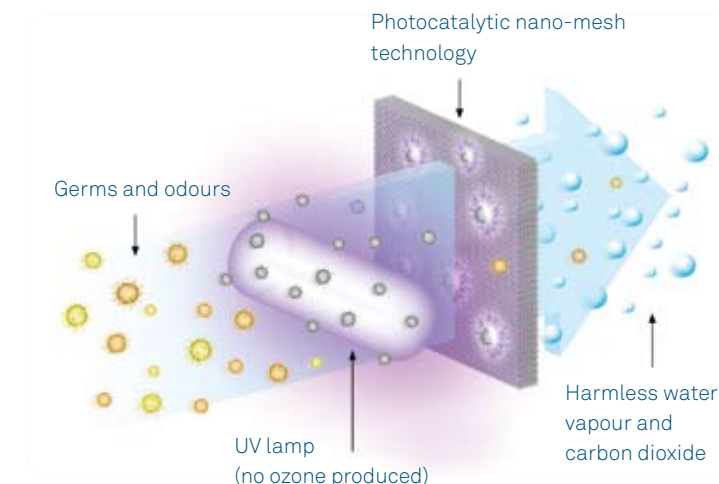
Enjoy breathing clean and healthy air



Even in a marine environment, the purity of the air could always be better. Biological pollution, gases and particles cause unpleasant odours and can afflict the human organism.

The new, mobile air purifier Dometic BreatheEasy provides reliable relief. The compact unit works using the two most effective air purifying methods: UV light, which produces no ozone due to its special frequency, and the innovative photocatalytic nano-mesh technology, which only Dometic uses. This combination allows you to thoroughly rid your yacht of foul smelling gases, of bacteria, viruses and mildew, and to reduce air-borne particles. A blessing for asthma and allergy sufferers in particular!

- Capacity to air purify rooms up to 14 m<sup>2</sup>
- Compact and attractive design
- Ready for connection to 12 volts
- Adapter for connection to 230 volts included with delivery



**Dometic BreatheEasy**

3.20



<b>Input voltage</b>	12 volts DC and 230 volts AC/50 Hz
<b>Current consumption</b>	500 mA
<b>Consumption</b>	5 watts
<b>Dimensions [W x H x D]</b>	129 x 115 x 45 mm
<b>Test mark</b>	CE
<b>Scope of delivery:</b> mobile air purifier, 12/230 volt connection. Available as of June 2010.	
<b>Product</b>	<b>Ref. No.</b>
Dometic BreatheEasy	9108680632

**NEW**

Mobile air purifier

No ozone produced