

# MTCGV Series Modular Chillers

## High-Performance R-410A Tempering Units



MTCGV 60,000 BTU/hr model shown

New MTCGV R-410A modular chillers provide installation flexibility, reliability, maximum performance, and accessibility for easy maintenance and repair. They are ideal as drop-in replacements for Cruisair MTC R-407C units.

These reverse-cycle modules are available in capacities of 24,000-120,000 BTU/Hr (2 to 10 tons). Up to six modules can be staged to achieve higher capacities.

Thermal expansion valves optimize performance over a wide range of conditions, while a hot gas bypass valve maintains heating performance in cold seawater. With reverse-cycle heating effectiveness in seawater temperatures as low as 38° F (3.5° C), the need for separate fossil fuel or electric water heaters is eliminated in most applications.

MTCGV chillers have two sub-modules, identical in dimensions, which allow a sub-module to be rotated to achieve more convenient water connection locations or compressor access. The sub modules can even be separated for remote mounting when space is limited. Sub-module changes can be handled in the field, or special ordered from the factory.

All units have built-in protection devices, including: high- and low-pressure switches, loop-water flow switch, hot-gas bypass valve, and loop-water freeze sensor. A wire harness with polarized plug is included for easy electrical connections.



MTCGV water connections match that of the MTC series for seamless retrofitting.



Compressor vibration-isolation mounts reduce noise and vibration transmission to the mounting surface.



Easily replaceable flow switch.

### Key Benefits

- R-410A replacement for Cruisair MTC chillers
- Modular design for installation flexibility
- Reverse-cycle heating
- Scroll compressors standard
- Dual sub-modules allow more convenient water connections or separation for remote mounting in tight spaces
- Removable seawater manifolds allow cleaning of condenser tubing
- Thermal expansion valve for optimal performance over a range of conditions
- Hot-gas bypass valve maintains heating performance in cold seawater and helps prevent water freezing in the heat exchanger
- Environmentally safe R-410A refrigerant

**Cruisair**<sup>®</sup>

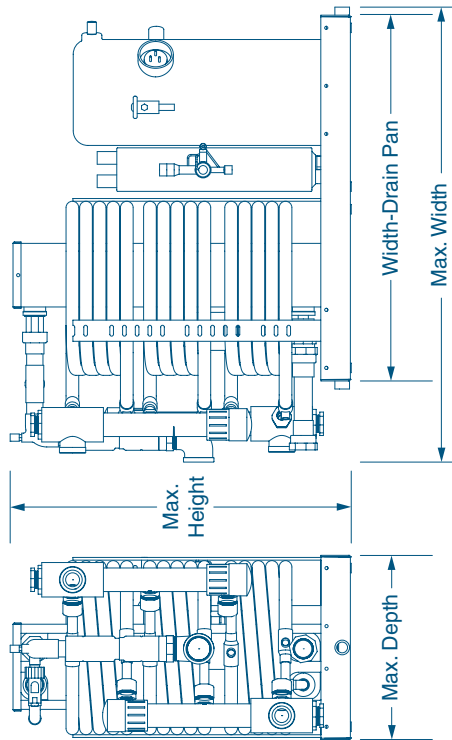
by Dometic GROUP

# Specifications for MTCGV Series Modular Chillers

| Model <sup>(1)</sup>                   | MTCGV36  | MTCGV48                    | MTCGV60           | MTCGV72       | MTCGV96   | MTCGV120    |
|--|----------|----------------------------|-------------------|---------------|-----------|-------------|
| Capacity (BTU/h)                       | 36000    | 48000                      | 60000             | 72000         | 96000     | 120000      |
| Voltage (V) <sup>(2)</sup>             | 230      | 220 230 460                | 230 380           | 230 380       | 230 380   | 230 460 380 |
| Cycle (Hz)/Phase (Ph)                  | 60/1     | 50/1 60/3                  | 60/1 60/3         | 60/3          | 60/3      | 60/3        |
| Full Load Amps (FLA) Cool (A)          | 12       | 12.3 8.3 5.1 14.7 5.2 5.8  | 17.8 11.3 5.9 8.3 | 14.2 7.1 10.1 | 20.3 25.3 | 12.4 15.4   |
| Full Load Amps (FLA) Heat (A)          | 15.7     | 13.8 10.9 5.8 21.4 6.6 7.6 | 20.2 23           | 17.9 8.9 13.3 | 25.5 31.3 | 15.3 19.2   |
| Locked Rotor Amps (LRA) (A)            | 105      | 115 45                     | 130 70            | 160 87        | 235 267   | 142 147     |
| Refrigerant Type                       | R410A    | R410A                      | R410A             | R410A         | R410A     | R410A       |
| Max. Height (in/mm) <sup>(3)</sup>     | 23.5/597 | 23.5/597                   | 23.5/597          | 23.5/597      | 26.8/681  | 26.8/681    |
| Width-Drain Pan (in/mm) <sup>(3)</sup> | 25.3/643 | 25.1/638                   | 25.1/638          | 25.1/638      | 33/839    | 33/839      |
| Max. Width (in/mm) <sup>(3)</sup>      | 33.7/856 | 33.5/851                   | 32.1/816          | 32.1/816      | 39/991    | 39/991      |
| Max. Depth (in/mm) <sup>(3)</sup>      | 12.8/326 | 12.7/323                   | 12.7/323          | 12.7/323      | 16.6/422  | 16.6/422    |
| Clearance Manifold (in/mm)             | 5/127    | 5/127                      | 5/127             | 5/127         | 6/153     | 6/153       |
| Seawater Inlet Connection (in/mm)      | 1/26     | 1/27                       | 1/26              | 1/26          | 1 1/4/32  | 1 1/4/32    |
| Chilled Water Connection Size (in/mm)  | 1/26     | 1/27                       | 1 1/4/32          | 1 1/4/32      | 1 1/2/38  | 1 1/2/38    |
| Chilled Water Connection Type          | FPT      | FPT                        | FPT               | FPT           | FPT       | FPT         |

<sup>1</sup> When ordering, add one of the following codes to the model number to specify voltage: 'C' for 230V/60Hz/1-Ph, 'CK' for 220-250V/50Hz/1-Ph, 'DC' for 230V/60Hz/3-Ph, 'EC' for 460V/60Hz/3-Ph, or 'ECC' for 380V/50Hz/3-Ph. For example, MTCGV240C = 230V/60Hz/3-ph unit.  
<sup>2</sup> For information about voltages not shown in this sheet, please contact Domestic/Marine sales at 954-973-2477.  
<sup>3</sup> All dimensions ± 0.30 in. (8 mm).

## Dimensions



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### 24/7 TECH SUPPORT FOR UNITED STATES & CANADA:

8:00 AM to 5:00 PM Eastern Time: 800-542-2477  
 After hours and weekends: 888-440-4494

### INTERNATIONAL SALES & SERVICES

Europe & the Middle East: Call +44(0)870-330-6101  
 For all other areas visit our website to find your nearest distributor.

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Specifications and availability subject to change without notice.

Dealer

