

# MCG Low-Profile Series Modular Chillers

## Space-Saving Chiller Design



Marine Air MCG Low-Profile Chillers are designed for locations onboard where height is an obstacle. At a height of only 18.25 in. (464 mm) for 3- to 6-ton models and 25.2 in. (640 mm) for 12.5- and 15-ton models, MCGLP units are much shorter than other chillers in the same capacity range, but no shorter on performance and reliability.

MCGLP chillers provide reverse-cycle cooling and heating and are available in capacities from 36,000 to 180,000 BTU/hr (3 to 15 tons). Individual modules can be staged for larger capacities. The MCGLP series uses R-410A environmentally safe refrigerant, which has exceptional thermodynamic properties and maximizes system efficiency.



MCG low-profile modules are available in capacities up to 15-tons and can be staged for higher capacities.

### Key Benefits

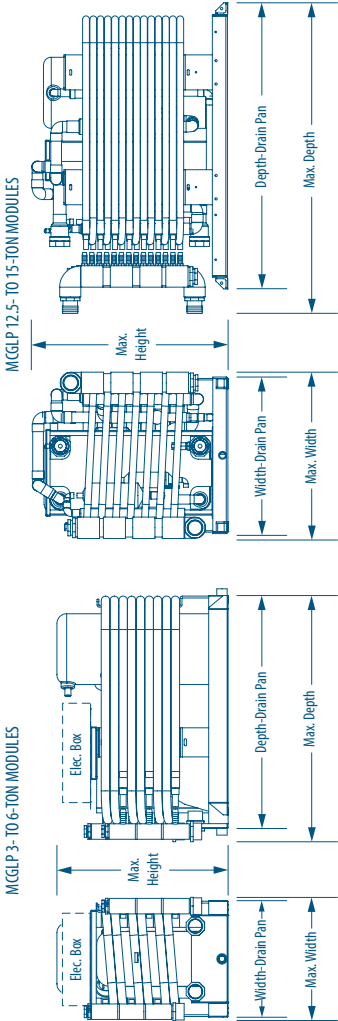
- Fits into height-restrictive spaces.
- Reverse-cycle heating.
- Stainless-steel drain pan on 36,000 - 72,000 BTU/hr models.
- Lightweight painted aluminum drain pan on 150,000 - 180,000 BTU/hr models.
- Up to six modules can be multiplexed for larger capacities.
- Up to 25% more condenser area than similar units.
- Spiral-fluted cupronickel condenser coil provides maximum heat transfer and corrosion resistance.
- Engineered to maximize the performance of R-410A, an environmentally safe refrigerant.
- Electrical box can be remotely mounted up to 6 ft. (1.8 m).
- Removable PVC water headers resist corrosion and erosion.
- Expansion valve modulates refrigerant for improved performance.
- Hot-gas bypass to provide heating in cold seawater conditions (36,000 - 72,000 BTU/hr models).
- Charged, tested, and leak checked at the factory.
- Meets or exceeds all applicable standards and regulation.
- Charge Guard protection provides sealed access ports, ensuring environmental protection and chiller module integrity.

Specifications for MCG Low-Profile Series Modular Chillers

| Model <sup>(1)</sup>                   | MCGULP36         |       |      |      | MCGULP48  |      |      |           | MCGULP60 |      |           |      | MCGULP72 |      |           |      | MCGULP150 |            |      |       | MCGULP180  |      |      |       |
|----------------------------------------|------------------|-------|------|------|-----------|------|------|-----------|----------|------|-----------|------|----------|------|-----------|------|-----------|------------|------|-------|------------|------|------|-------|
|                                        | Capacity (BTU/h) | 230   | 220  | 460  | 230       | 220  | 460  | 6000      | 230      | 220  | 460       | 6000 | 230      | 220  | 460       | 7200 | 230       | 220        | 460  | 15000 | 230        | 220  | 460  | 18000 |
| Voltage (V)                            | 36000            | 230   | 220  | 460  | 230       | 220  | 460  | 6000      | 230      | 220  | 460       | 6000 | 230      | 220  | 460       | 7200 | 230       | 220        | 460  | 15000 | 230        | 220  | 460  | 18000 |
| Cycle (Hz/Phase (Ph))                  | 60/1             | 50/1  | 60/3 | 60/1 | 50/1      | 60/3 | 60/3 | 60/1      | 50/1     | 60/3 | 60/3      | 60/1 | 50/1     | 60/3 | 60/3      | 60/1 | 50/3      | 60/3       | 60/3 | 60/3  | 50/3       | 60/3 | 60/3 | 60/3  |
| Full Load Amps (FLA) Cool (A)          | 12.9             | 12.3  | 8.3  | 3.9  | 13.8      | 14.7 | 11.3 | 5.8       | 5.2      | 17.8 | 22.2      | 11.3 | 8.3      | 5.9  | 20.1      | 14.2 | 10.1      | 7.1        | 30.6 | 19.9  | 15.1       | 38.3 | 24.1 | 20.2  |
| Full Load Amps (FLA) Heat (A)          | 16.8             | 18    | 10.9 | 5    | 20.2      | 21.4 | 14   | 7.6       | 6.6      | 23   | 29.1      | 14.8 | 10.8     | 7.4  | 29.3      | 17.9 | 13.3      | 8.9        | 38.9 | 24.5  | 19.3       | 50   | 29.9 | 25    |
| Locked Rotor Amps (LRA) (A)            | 105              | 102.5 | 95   | 45   | 150       | 130  | 120  | 70        | 60       | 145  | 130       | 123  | 87       | 70   | 145       | 160  | 100       | 87         | 304  | 197   | 147        | 351  | 239  | 197   |
| Max. Circuit Breaker (A)               | 77               | 75    | 50   | 23   | 85        | 90   | 58   | 33        | 30       | 101  | 101       | 60   | 42       | 33   | 94        | 81   | 42        | 144        | 86   | 67    | 168        | 114  | 86   | 49    |
| Min. Circuit Ampacity (A)              | 43               | 41    | 27   | 12   | 48        | 50   | 33   | 19        | 17       | 57   | 57        | 34   | 24       | 19   | 53        | 45   | 24        | 80         | 49   | 38    | 94         | 64   | 49   |       |
| Refrigerant Type                       | R410A            |       |      |      | R410A     |      |      | R410A     |          |      | R410A     |      |          |      | R410A     |      |           | R410A      |      |       |            |      |      |       |
| Max. Height (in/mm) <sup>(2)</sup>     | 18.25/464        |       |      |      | 18.25/464 |      |      | 18.25/464 |          |      | 18.25/464 |      |          |      | 18.25/464 |      |           | 25.2/641   |      |       | 25.2/641   |      |      |       |
| Width-Drain Pan (in/mm) <sup>(2)</sup> | 12/305           |       |      |      | 12/305    |      |      | 12/305    |          |      | 12/305    |      |          |      | 12/305    |      |           | 20.13/512  |      |       | 20.13/512  |      |      |       |
| Max. Width (in/mm) <sup>(2)</sup>      | 12.69/323        |       |      |      | 12.69/323 |      |      | 12.69/323 |          |      | 12.69/323 |      |          |      | 12.69/323 |      |           | 21.5/547   |      |       | 21.5/547   |      |      |       |
| Depth-Drain Pan (in/mm) <sup>(2)</sup> | 24/610           |       |      |      | 24/610    |      |      | 24/610    |          |      | 24/610    |      |          |      | 24/610    |      |           | 36.75/934  |      |       | 36.75/934  |      |      |       |
| Max. Depth (in/mm) <sup>(2)</sup>      | 25.38/645        |       |      |      | 25.38/645 |      |      | 25.38/645 |          |      | 25.38/645 |      |          |      | 25.38/645 |      |           | 40.03/1017 |      |       | 40.03/1017 |      |      |       |
| Seawater Inlet Connection (in/mm)      | 1/26             |       |      |      | 1/26      |      |      | 1/26      |          |      | 1/26      |      |          |      | 1/26      |      |           | 2/51       |      |       | 2/51       |      |      |       |
| Chilled Water Connection Size (in)     | 1                |       |      |      | 1         |      |      | 1 1/4     |          |      | 1 1/4     |      |          |      | 1 1/4     |      |           | 2          |      |       | 2          |      |      |       |
| Height-Electrical Box (in/mm)          | 11/280           |       |      |      | 11/280    |      |      | 11/280    |          |      | 11/280    |      |          |      | 11/280    |      |           | 13.3/338   |      |       | 13.3/338   |      |      |       |
| Width-Electrical Box (in/mm)           | 9.8/249          |       |      |      | 9.8/249   |      |      | 9.8/249   |          |      | 9.8/249   |      |          |      | 9.8/249   |      |           | 12/305     |      |       | 12/305     |      |      |       |
| Depth-Electrical Box (in/mm)           | 3.7/94           |       |      |      | 3.7/94    |      |      | 3.7/94    |          |      | 3.7/94    |      |          |      | 3.7/94    |      |           | 4.3/110    |      |       | 4.3/110    |      |      |       |

<sup>1</sup> For information about net weight and shipping weight please contact a Dometic Marine sales representative at 954-973-2477.  
<sup>2</sup> All dimensions ± 0.30 in. (8 mm).

Dimensions



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Specifications and availability subject to change without notice.

Dealer

