

MTD Series Modular Chillers

Engineered for Environmentally Safe R-410A Refrigerant



The Cruisair MTD is a modular chiller engineered for optimal use of the new environmentally safe R-410A refrigerant. This tempered-water unit provides installation flexibility, reliability, maximum performance, and easy accessibility for maintenance and repair.

Flexible hose improves alignment for customer connections, and all seawater connections are reinforced with stainless-steel for added strength. Thermal expansion valves optimize performance over a wide range of conditions, while a hot-gas bypass valve maintains heating performance in cold seawater and helps prevent water freezing in the heat exchanger. With heating performance effective in cold 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.

The MTD is available in capacities of 24,000 to 120,000 BTU/hr (2 to 10 tons), and you can use multiple modules in any combination to achieve the total desired capacity. Custom frame and water-manifold installation for multiple units are also available. A reverse-cycle unit, the MTD provides reliable cooling and heating.

Each MTD unit has two sub-modules. This lets you rotate a sub-module 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.

The MTD has many built-in protection devices. A wire harness with polarized plug is included for easy electrical connections.

MTD units are available with several different compressors to suit a variety of power systems, including: 230V/60Hz/1Ph, 220V/50Hz/1Ph, 230V/60Hz/3Ph, 380V/50Hz/3Ph, and 460V/60Hz/3Ph.

Optional Variable Frequency Drives (VFDs) are available, which eliminate start-up power surge and run the unit at full-capacity 60Hz even with 50Hz input. The VFD requires a 3-phase tempering unit, but can operate on 1- or 3-phase input power.

Key Benefits

- Engineered to maximize the performance of R-410A, an environmentally safe refrigerant.
- Modular design for installation flexibility.
- Reverse-cycle heating.
- Scroll compressors standard.
- Larger drain fittings for faster condensate drainage.
- Stainless-steel reinforced seawater connections.
- Flexible hose improves connection alignment.
- Removable seawater manifolds allow cleaning of condenser tubing.
- Integrated loop-water strainer and flow switch.
- Oversized heat exchangers for loop temperatures of 40°F (4.4°C) in cooling and 120°F (49°C) in heating.
- 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.

Cruisair[®]

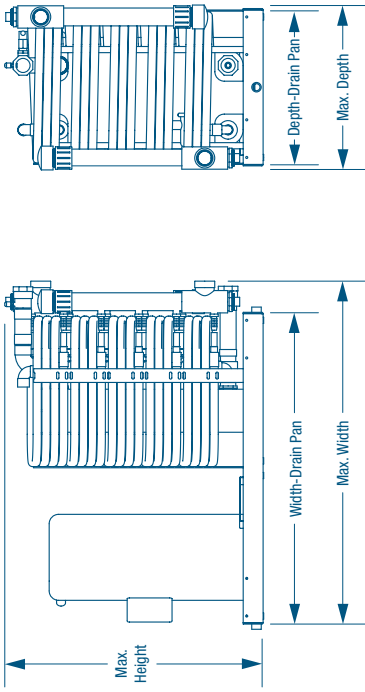
by Dometic GROUP

Specifications for MTD Series Modular Chillers

Model	MTD24			MTD30			MTD36			MTD48			MTD60			MTD72			MTD96			MTD120																	
Capacity (BTU/h)	24000			30000			36000			48000			60000			72000			96000			120000																	
Voltage (V)	230	220	460	230	220	230	220	230	460	230	220	230	220	230	460	380	230	460	380	230	460	380	230	460	380	230	460	380	230	460	380	230	460	380	230	460	380	230	460
Cycle (Hz/Phase (Ph))	60/1	50/1	60/3	60/1	50/1	60/3	60/1	50/1	60/3	60/1	50/1	60/3	60/1	50/1	60/3	60/1	50/1	60/3	60/1	50/1	60/3	60/1	50/1	60/3	60/1	50/1	60/3	60/1	50/1	60/3	60/1	50/1	60/3	60/1	50/1	60/3			
Full Load Amps (FLA) Cool (A)	6.4	9.6	6.9	3.11	8.4	9.9	6.4	3.3	12.3	8.3	3.9	13.8	14.7	11.3	5.2	5.8	17.8	22.2	11.3	5.9	8.3	20.1	14.2	7.1	10.1	22.3	9.2	14.7	25.3	12.4	15.4								
Full Load Amps (FLA) Heat (A)	9.5	11.9	9	4.06	12.2	13	8.3	4.2	15.7	18	10.9	5	20.2	21.4	14	6.6	7.6	23	29.1	14.8	7.4	10.8	29.3	17.9	8.9	13.3	31.5	13.4	14.9	31.3	15.3	19.2							
Locked Rotor Amps (LRA) (A)	58.3	97	95	45	77	97	71	38	105	102.5	95	45	150	120	60	70	145	130	123	70	87	145	160	87	100	235	110	267	142	147									
Max. Circuit Breaker (A)	45	20	56	60	35	16	77	75	50	23	85	90	58	30	33	101	60	33	42	94	81	42	101	42	56	103	50	67											
Min. Circuit Ampacity (A)	25	28	25	13	32	34	20	9	43	41	27	12	48	50	33	17	19	19	34	19	24	53	45	24	57	24	32	58	29	38									
Refrigerant Type	R410A			R410A			R410A			R410A			R410A			R410A			R410A			R410A			R410A			R410A			R410A			R410A					
Max. Height (in/mm) (1)	17/432			17/432			17/432			17/432			17/432			17/432			17/432			17/432			17/432			17/432			17/432			17/432			17/432		
Width-Drain Pan (in/mm) (1)	25.3/643			25.3/643			25.3/643			25.3/643			25.3/643			25.3/643			25.3/643			25.3/643			25.3/643			25.3/643			25.3/643			25.3/643			25.3/643		
Max. Width (in/mm) (1)	25.3/643			28.3/719			12.8/326			13.4/341			1/26			1/26			1/26			1/26			1/26			1/26			1/26			1/26			1/26		
Depth-Drain Pan (in/mm) (1)	12.8/326			12.8/326			12.8/326			12.8/326			12.8/326			12.8/326			12.8/326			12.8/326			12.8/326			12.8/326			12.8/326			12.8/326			12.8/326		
Max. Depth (in/mm) (1)	12.8/326			13.4/341			13.4/341			13.4/341			13.4/341			13.4/341			13.4/341			13.4/341			13.4/341			13.4/341			13.4/341			13.4/341			13.4/341		
Seawater Connection (in/mm)	3/16			3/16			3/16			3/16			3/16			3/16			3/16			3/16			3/16			3/16			3/16			3/16			3/16		
Chilled Water Connection	1			1			1			1			1			1			1			1			1			1			1			1			1		
Chilled Water Connection Type	FPT			FPT			FPT			FPT			FPT			FPT			FPT			FPT			FPT			FPT			FPT			FPT			FPT		

1 All dimensions ± 0.30 in. (8 mm).

Dimensions



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Specifications and availability subject to change without notice.

Dealer

