R-410A Green Gas

TWC Series Modular Chillers

Enclosed Modular Chillers with a Compact Footpring

Cruisair's TWC Compact is a high-performance, cost effective tempering unit. The reverse cycle TWC cools and heats, and is available in an expanded product range of 24,000 (2-ton) to 72,000 (6-ton) BTU/hr capacities. The three new models include 48,000 (4-ton), 60,000 (5-ton), and 72,000 (6-ton) BTU/hr units. Units can be multiplexed for even larger capacities as required.

Each unit includes a chilled water (CW) flow switch, refrigerant high- and low-refrigerant pressure switches, and inlet and outlet CW temperature sensors. The TWC does not include a chilled water modulating flow control, which means air handlers with or without flow controls can be used.* The brazed platecoil evaporator and coaxial cupronickel seawater condenser allow for superior cooling and heating performance.

On 2- to 3-ton units, an electrical box mounted on top of the chiller houses the control board as well as starting components, and can be mounted remotely up to 6 ft. (1.8 m) away. On 4- to 6-ton units, the electric box is normally contained within the enclosure and does not contribute to height. A remote electric box is available upon request for 4- to 6-ton units.

Two control systems are available. The standard control is our proven Digital Diagnostic Control (DDC) that provides simple, single-stage operation. For multiplexed systems, the Tempered Water Logic Control (TWLC) with LCD screen is available. Depending on the configuration, additional cables, switches, sensors, or a display may be required.

All TWC chillers come with R-410A, the preferred environmentally safe refrigerant used in modern, high-efficiency air conditioning systems.

*On larger boats we always recommend using flow-controlled air handlers to ensure proper water distribution. A balancing flow control (BFC) is not needed when using TWC chillers.

TWC modular chillers have a compact footprint and feature a fully enclosed design.

Key Benefits

- Compact, enclosed design.
- Reverse-cycle heating.
- High-efficiency rotary or scroll compressors.
- Includes flow switch, high- and low-pressure switches, and inlet and outlet circulated water temperature sensors.
- Large heat exchangers for superior performance in booth cooling and heating.
- Engineered to maximize the performance of R-410A, an environmentally safe refrigerant.
- Electrical box can be mounted remotely (TWCV24 and 36 models).

Cruisair® by Dometic GROUP

Specifications for TWC Series Modular Chillers

Model [1]	TWCV24		TWCV30			TWCV36					TWCV48					TWCV60					TWCV72			
Capacity (BTU/h)	24000		30000			36000					48000					60000					72000			
Voltage (V) [2]	220	380	230	220	230	220	230	460	380		230	220	230	460	380	230	220	230	460	380	230		460	380
Cycle (Hz)/Phase (Ph)	50/1		60/1	50/1	60/3	60/1	50/1	60/3		50/3	60/1	50/1	60/3		50/3	60/1	50/1	60/3		50/3	60/1	60/3		50/3
Full Load Amps (FLA) Cool (A)	9.5	3.5	9.1	10.3	7.2	12	9.6	8.3	3.9	5.1	13.8	14.7	11.3	5.2	5.8	15.8	22.2	11.3	5.9	8.3	19.7	16.2	7.1	10.1
Full Load Amps (FLA) Heat (A)	11.8	4.6	13.3	12	9.1	15.7	12.7	10.9	5	6.6	20.2	21.4	14	6.6	7.6	23	29.1	14.8	7.4	10.8	29.3	20.1	8.9	13.3
Locked Rotor Amps (LRA) (A)	63	45	96.7	63	73	105	63	95	45	50	150	130	120	60	70	145	130	123	70	87	145	160	87	100
Max. Circuit Breaker (A)	40	20	60	45	35	77	45	50	20	27	85	90	58	30	33	101	100	60	33	42	94	81	42	
Min. Circuit Ampacity (A)	28	13	34	28	21	43	28	27	13	15	48	50	33	17	19	57		34	19	24	53	45	24	
Refrigerant Type	R410A		R410A			R410A					R410A					R410A					R410A			
Height-Without Elec. Box (in/mm) [3]	18.6/473		18.6/473			18.6/473					23.4/595					23.4/595					23.4/595			
Height-With Elec. Box (in/mm) [3]	22.6/575		22.6/575			22.6/575					23.4/595					23.4/595					23.4/595			
Max. Width (in/mm) [3]	13/331		13/331			13/331					13.3/338					13.3/338					13.3/338			
Depth-Drain Pan (in/mm) [3]	18.8/478		18.8/478			18.8/478					18.8/478					18.8/478					18.8/478			
Max. Depth (in/mm) [3]	19.4/493		19.4/493			19.4/493					23.9/608					23.9/608					23.9/608			
Seawater Inlet Connection (in/mm)	⅝ /16		⅝ /16			⅝/16					1¼ /32					1¼ /32					1¼ /32			
Chilled Water Connection Size (in)	1		1			1					1					1¼					1¼			
Chilled Water Connection Type	HB		HB			HB					FPT					FPT					FPT			

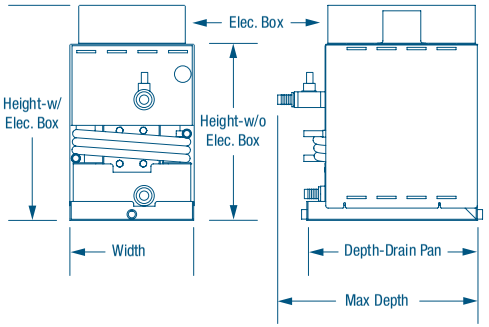
[1] Add a 'C' for 230V/60Hz/1-Ph, 'CK' for 220-250V/50Hz/1-Ph, 'DC' for 230V/60Hz/3-Ph, 'ECK' for 460V/60Hz/3-Ph, or 'EC' for 380V/50Hz/3-Ph. For example, TWCV24DC = 230V/60Hz/3-ph unit.

[2] For information about voltages not shown in this sheet, please contact Dometic Marine sales at 954-973-2477.

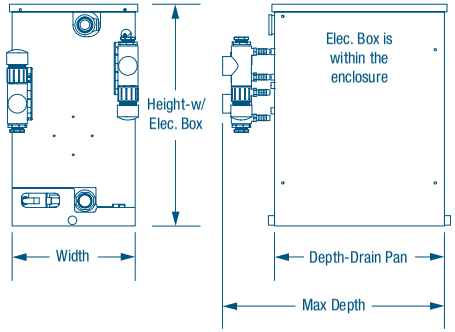
[3] All dimensions ± 0.30 in. (8 mm).

Dimensions

TWC 24,000 - 36,000 BTU/H MODELS



TWC 48,000 - 72,000 BTU/H MODELS



DOMETIC MARINE DIVISION
2000 N. Andrews Ave. | Pompano Beach, FL 33069 USA | Tel. 954-973-2477 | Fax: 954-979-4414
www.Dometic.com/Marine | MarineSales@DometicUSA.com

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.

Environmentally Responsible

Assembled in the USA

Dealer

CHILLED WATER AIR CONDITIONING