

TWC Series Modular Chillers

Enclosed Modular Chillers with a Compact Footprint



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).

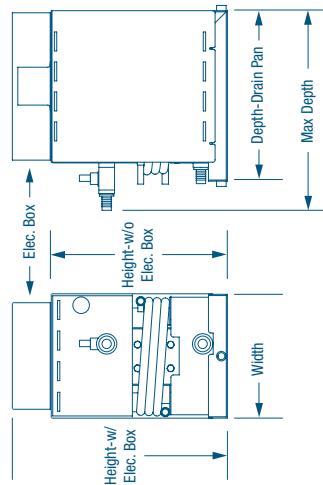
Specifications for TWC Series Modular Chillers

Model ⁽¹⁾	TWC24			TWC30			TWC36			TWC48			TWC60			TWC72			
	24000	30000	36000	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	
Capacity (BTU/h)	24000	30000	36000	380	460	507	380	460	507	48000	380	460	507	380	460	507	380	460	507
Voltage (V) ⁽²⁾	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1	50/1
Cycle Hz/Phase (Ph)	9.5	9.1	10.3	7.2	12	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	60/3
Full Load Amps (FLA) Cool (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	7.1
Full Load Amps (FLA) Heat (A)	63	45	96.7	63	73	105	63	95	45	50	130	120	70	60	70	145	130	123	20.1
Locked Rotor Amps (LRA) (A)	40	20	60	45	35	77	45	50	23	27	85	90	58	30	33	101	100	60	87
Max. Circuit Breaker (A)	28	13	34	28	21	43	28	27	12	15	48	50	33	17	19	57	34	34	81
Min. Circuit Ampacity (A)	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant Type	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473	18.6/473
Height-Without Elec. Box (in/mm) ⁽³⁾	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575	22.6/575
Height-With Elec. Box (in/mm) ⁽³⁾	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331	13/331
Max. Width (in/mm) ⁽³⁾	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478	18.8/478
Depth-Drain Pan (in/mm) ⁽³⁾	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493	19.4/493
Max. Depth (in/mm) ⁽³⁾	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16
Seawater Connection (in/mm)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Chilled Water Connection Size (in)	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Chilled Water Connection Type	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT	FBT

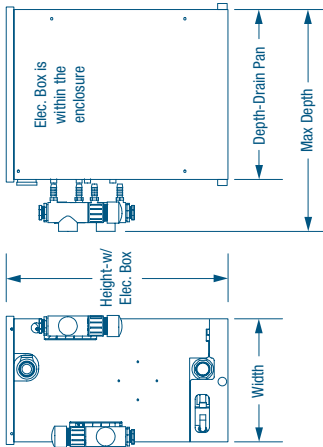
¹ Add a 'C' for 230V/60Hz/1-Ph, 'CK' for 220-250V/50Hz/1-Ph, 'DC' for 230V/60Hz/3-Ph, 'ECK' for 460V/60Hz/3-Ph, or 'EC' for 380V/50Hz/3-Ph. For example, TWC24DC = 230V/60Hz/3-ph unit.
² For information about voltages not shown in this sheet, please contact Dometic Marine sales at 954-973-2477.
³ All dimensions ± 0.39 in. (8 mm).

Dimensions

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



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



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 For all other areas visit our website to find your nearest distributor.

L-2430 Rev. 20130215

Specifications and availability subject to change without notice.

Dealer

