

# DuraSea Series Air-Cooled Condensers

## The Only Marinized Air-Cooled Condenser



Dometic DuraSea air conditioning condensing units are designed for maximum durability in the harshest of nautical applications. These rugged units offer long service life, exceptional performance, energy conservation, and reliability.

The DuraSea's cabinet is constructed of stainless-steel 304, which resists heavy salt-spray and also provides UV protection. Designed for deck or rooftop mounting, the optional risers elevate the unit above the mounting surface to provide excellent water drainage and protect the coil from debris and salt water. To further fortify the unit from severe marine conditions, corrosion-resistant stainless-steel fasteners are used, and all other external components have a protective coating. The control box and compressor are strategically located within the cabinet for easy service access and for extra protection against corrosion.

All DuraSea units employ scroll compressors, the latest in high-efficiency, reliable compressor technology. They reduce noise and vibration, and have a higher tolerance of liquid refrigerant and system contaminants. Scroll compressors also feature low start torque to minimize the starting-current spike that occurs with old-technology compressors. Units are available in 410A refrigerant or 417A refrigerant for retrofit of existing systems.

The new 7.5- and 10-ton sizes offer a compact footprint in an "industrial" styled equipment design that includes forklift slots and lifting eyes.



DCA60 shown with service panel removed and optional risers which protect the unit from debris.

### Key Benefits

- Designed for workboats, platform, and military vessels.
- Built to withstand the harsh elements of the commercial marine environment.
- Operates with most evaporators.
- Hermetically-sealed scroll compressor with internal overload protection.
- Permanently lubricated fan motor with Ingress Protection of IP 54 or better.
- High-efficiency copper tube and aluminum fin coil with dipped E-coating that exceeds 6,000-hour salt spray test.
- Copper tube/copper fin coil upgrade available for the ultimate in corrosion protection.
- Brass base valves with sweat connections and service ports.
- Vertical fan mount design.
- High- and low-pressure controls.
- Heavy-duty contactor with lug connections.
- Optional risers elevate the unit above the mounting surface to protect the coil from salt water and debris (3-ton to 6-ton models only).
- Optional stainless-steel 316 cabinet construction for maximum corrosion resistance.

### Key Options

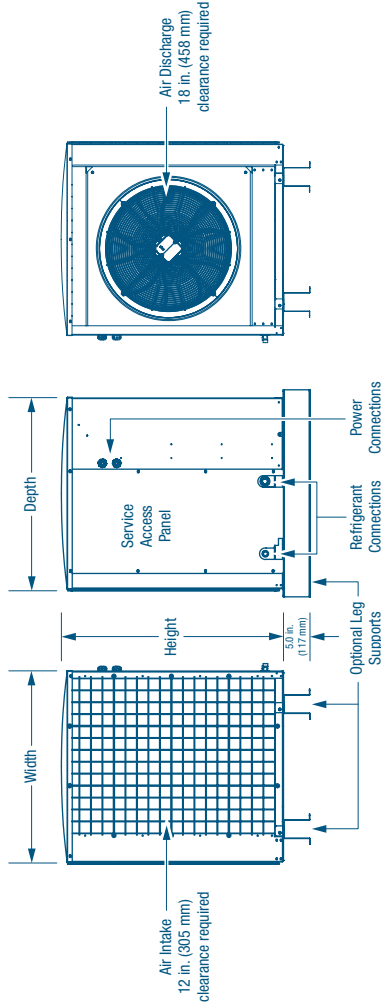
- Nema 4 electric box.
- Fan cycling control.
- Three-phase monitor.
- Crankcase heater.

### Specifications for DuraSea Series Air-Cooled Condensers

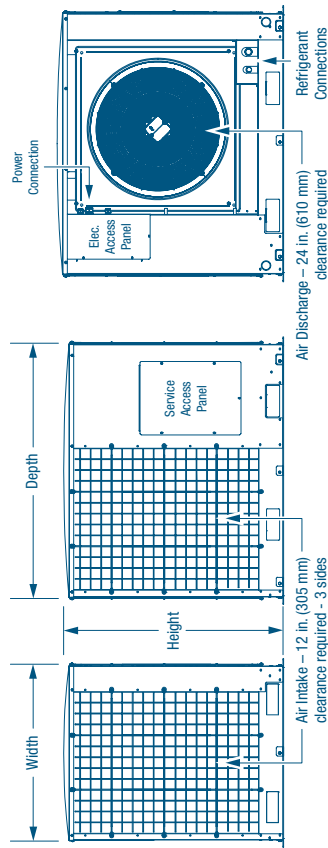
Model	DC360	DC36E	DC480	DC48E	DC600	DC60E	DC720	DC72E	DC900	DC90E	DC1200	DC120E
Nominal Capacity (BTU/h)	36000	36000	48000	48000	60000	60000	72000	72000	90000	90000	120000	120000
Voltage (V)	230	460	230	460	230	460	230	460	230	460	230	460
Cycle (Hz)/Phase (Ph)	60/3	60/3	50/3	50/3	60/3	60/3	60/3	60/3	60/3	60/3	60/3	60/3
Run Load Amps (RLA) (A)	10.9	5	12.7	6.6	14.8	7.4	17.9	8.9	25.5	13.4	31.3	15.3
Locked Rotor Amps (LRA) (A)	95	45	120	60	123	70	160	87	235	110	267	142
Full Load Amps (FLA) Blower (A)	3.6	2	3.6	2	3.6	2	3.6	2	3.6	2	8.5	4.9
Max. Circuit Breaker (A) (1)	35	20	60	20	60	35	55	40	70	30	75	30
Min. Circuit Ampacity (A) (2)	25	15	36	15	37	21	40	26	50	25	55	26
Min. Volts (V)/Max. Volts (V)	197/253	414/506	197/253	414/506	197/253	414/506	197/253	414/506	197/253	414/506	197/253	414/506
Refrigerant Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Air Flow (cfm)	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	10000	10000
Height (in/mm)	38.5/978	38.5/978	38.5/978	38.5/978	38.5/978	38.5/978	38.5/978	38.5/978	42/1067	42/1067	42/1067	42/1067
Width (in/mm)	33/839	33/839	33/839	33/839	33/839	33/839	33/839	33/839	33/839	33/839	33/839	33/839
Depth (in/mm)	33/839	33/839	33/839	33/839	33/839	33/839	33/839	33/839	48/1220	48/1220	48/1220	48/1220
Refrigerant Line Connection-Discharge (in/mm) (3)	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	3/8	3/8	3/8	3/8
Refrigerant Line Connection-Suction (in/mm) (3)	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	1 1/8	1 1/8	1 1/8	1 1/8
Sound Level (dB) (4)	84	84	84	84	84	84	84	84	84	84	87	87
Net Weight (lbs) (5)	290	290	310	310	365	365	375	375	475	475	525	525

1 Must use time-delay fuses or HACR type circuit breakers of the same size as listed  
 2 Wire size should be determined in accordance with applicable electrical codes; extensive wire runs require larger size wires  
 3 Up to 50 ft. (15.2 m) in equivalent line length.  
 4 As measured 3 ft. (0.9 m) away from the condensing unit  
 5 Weight for aluminum fin condenser coil with coating

### DuraSea 3- to 6-Ton Dimensions



### DuraSea 7.5- to 10-Ton Dimensions



### DuraSea Model Number Nomenclature

D C A 0 3 6 A 4 6 3 C 0 A A

- DuraSea Condensing Unit**
- Refrigerant Type**  
A = R410A  
B = R417A
- Nominal Tonnage**  
036 = 3 Tons  
048 = 4 Tons  
060 = 5 Tons  
072 = 6 Tons  
090 = 7.5 Tons  
120 = 10 Tons
- Control Type**  
A = None (use with 24VAC thermostat)  
Q = Q Control
- Voltage**  
2361 = 230V/60Hz/1-Ph  
2251 = 220V/50Hz/1-Ph  
2363 = 208-230V/60Hz/3-Ph  
4663 = 460V/60Hz/3-Ph  
3853 = 380V/50Hz/3-Ph
- Design Revision**  
A = Initial Rev
- Not Used**  
0 = Not used
- Coil Options**  
A = Al Fin/Copper Tube  
B = E-Coat Al/Al  
C = Copper Fin/Tube
- Options**  
A = None  
B = Nema 4x electric box and heatsrunk electric connections  
C = Low ambient fan cycling control  
D = Phase monitor  
E = Valve Fan Side (VFS) standard on 7.5/10-ton models  
F = Variable frequency drive  
G = Crankcase heater  
H = Suction accumulator  
I = Reserved for future use  
J = Reserved for future use  
K = Combination of options B, C, D, G, and H

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Specifications and availability subject to change without notice.

Dealer

