

Emerald Series (6K-16K) Condensers

Innovative Chassis Conquers Installation Challenges

Uses
R-410A

Photo courtesy of Viking Yachts



EQ12 shown

After listening to boat builders, global service teams and boat owners, Dometic engineers designed the innovative Emerald Condenser series to harness and maximize the impressive performance of R-410A refrigerant while meeting all international clean air standards.

The increase in BTU capacity is due primarily to the improved refrigerant metering design. The bi-flow thermal expansion valve for cooling provides up to a 14% increase in system capacity, which, when combined with a separate metering system for heating, attains an increase of up to 10% in heating performance. The amperage reduction of up to 27% is due to the more efficient design of the rotary compressor and properly sized refrigerant components.

The compact design of the Emerald series incorporates built-in vibration-isolating mounts, two large drain connections and numerous mounting options for installation to a smooth deck, stringer or existing rack. The incorporated lifting handles and smooth bottom allows for easy lifting and quick placement of the unit. The molded composite no-rust drain pan is shaped to provide positive drainage even when the boat heaves and rolls. The amount of standing water in the drain pan is reduced by up to 85%, which is 8x times less than a typical drain pan.

Emerald condensers can be installed quickly and easily. The drain, seawater and refrigerant connections are conveniently located to conquer installation challenges thus reducing installation time by up to fifteen minutes. The electrical box can be easily removed and located up to 5 ft. (1.5 m) away, further reducing the size of the unit while making the system more accessible. The reversing valve, pressure switches and service ports are centrally located, high on the unit for access from any side.

Key Benefits

- Up to 17.5% increase in BTU capacity
- Up to 41% amperage reduction
- Up to 32% reduced start-up amps
- Up to 16% smaller
- Up to 25% lighter
- Up to 85% reduction in standing water in the drain pan
- Up to 15 minutes faster to install
- Square chassis for easy installation in tight spaces
- Three mounting options adapt to installation environments
- Rust-free composite drain pan
- Reconfigurable chassis allows optimal drain connections
- Cushioned compressor mounts reduce noise and vibration
- Built-in refrigerant line filter drier reduces installation time and protects the compressor from moisture and contaminants
- Reversing valve, pressure switches, and service ports centrally located for easy maintenance access from any side
- Engineered to maximize performance of R-410A, an environmentally safe refrigerant

Technical Specifications for Emerald Condenser 6K-16K Series

MODEL ⁽¹⁾	EQ6		EQ8		EQ10		EQ12		EQ16		
	Capacity (BTU/Hr)	6,000	8,000	10,000	12,000	16,000	20,000	24,000	30,000	40,000	
Power (Volt/Hz/Ph)	115/60/1	230/60/1	240/50/1	115/60/1	240/50/1	230/60/1	240/50/1	230/60/1	240/50/1	230/60/1	240/50/1
Full Load Amps (FLA) – Cool	3.8	1.8	2.4	5.6	2.4	2.6	2.4	3.4	2.8	4.3	3.9
Full Load Amps (FLA) – Heat	5.1	2.4	3.3	7.7	3.3	3.6	3.3	4.5	3.8	5.8	5.3
Locked Rotor Amps	36.0	17.7	17.7	42.0	18.8	22.0	22.0	28.0	21.0	34.0	22.0
Max. Circuit Breaker (Amps)	15.0	10.0	10.0	25.0	10.0	15.0	10.0	15.0	10.0	15.0	15.0
Min. Circuit Ampacity	11.0	7.0	6.0	15.0	8.0	9.0	8.0	10.0	8.0	11.0	10.0
Refrigerant Type	R-410A										
Seawater Flow (gpm/lpm)	1.5/5.7										
Height (in/mm)	12.0/305										
Width (in/mm)	13.3/338										
Min. Depth (in/mm) ⁽²⁾	13.3/338										
Max. Depth (in/mm) ⁽³⁾	15.1/384										
Seawater Connection	5/8 in. hose clamp										
Discharge Connection	1/4 in.										
Suction Connection	3/8 in.										
Net Weight (lbs./kg.)	43.0/19.5										
Gross Weight (lbs./kg.)	50.0/22.7										
	EQ8		EQ10		EQ12		EQ16		EQ16		
	8,000	10,000	12,000	16,000	20,000	24,000	30,000	40,000	50,000	60,000	
Height (in/mm)	12.0/305	13.3/338	13.3/338	15.1/384	15.1/384	5/8 in. hose clamp	1/4 in.	3/8 in.	47.0/21.3	49.0/22.2	
Width (in/mm)	13.3/338	13.3/338	13.3/338	15.1/384	15.1/384	5/8 in. hose clamp	1/4 in.	3/8 in.	47.0/21.3	49.0/22.2	
Min. Depth (in/mm)	13.3/338	13.3/338	13.3/338	15.1/384	15.1/384	5/8 in. hose clamp	1/4 in.	3/8 in.	47.0/21.3	49.0/22.2	
Max. Depth (in/mm)	15.1/384	15.1/384	15.1/384	15.1/384	15.1/384	5/8 in. hose clamp	1/4 in.	3/8 in.	47.0/21.3	49.0/22.2	
Net Weight (lbs./kg.)	43.0/19.5	43.0/19.5	43.0/19.5	43.0/19.5	43.0/19.5	43.0/19.5	43.0/19.5	43.0/19.5	43.0/19.5	43.0/19.5	
Gross Weight (lbs./kg.)	50.0/22.7	50.0/22.7	50.0/22.7	50.0/22.7	50.0/22.7	50.0/22.7	50.0/22.7	50.0/22.7	50.0/22.7	50.0/22.7	

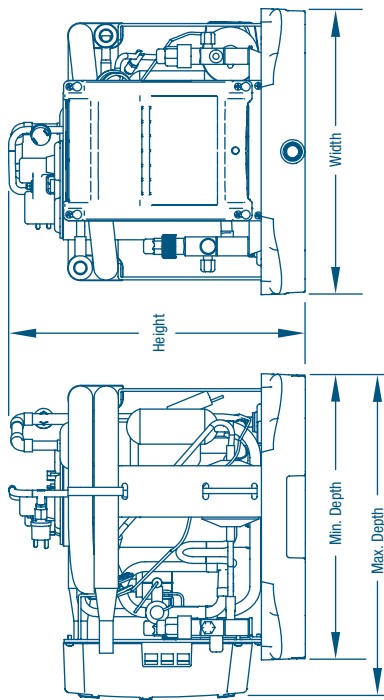
¹ EQ models have a 0-Logic control. For units with a mechanical control, replace the "Q" with "M", e.g. "EM16".

² Actual unit depth when electrical box is mounted remotely.

³ Combined depth of unit and electrical box, as shown in the drawing below.

Electrical Box Dimensions (in/mm)

HEIGHT	WIDTH	DEPTH
8.75/222	6.50/165	2.63/67



Dealer:



Environmentally Responsible



Made in the USA

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Specifications and availability subject to change without notice.