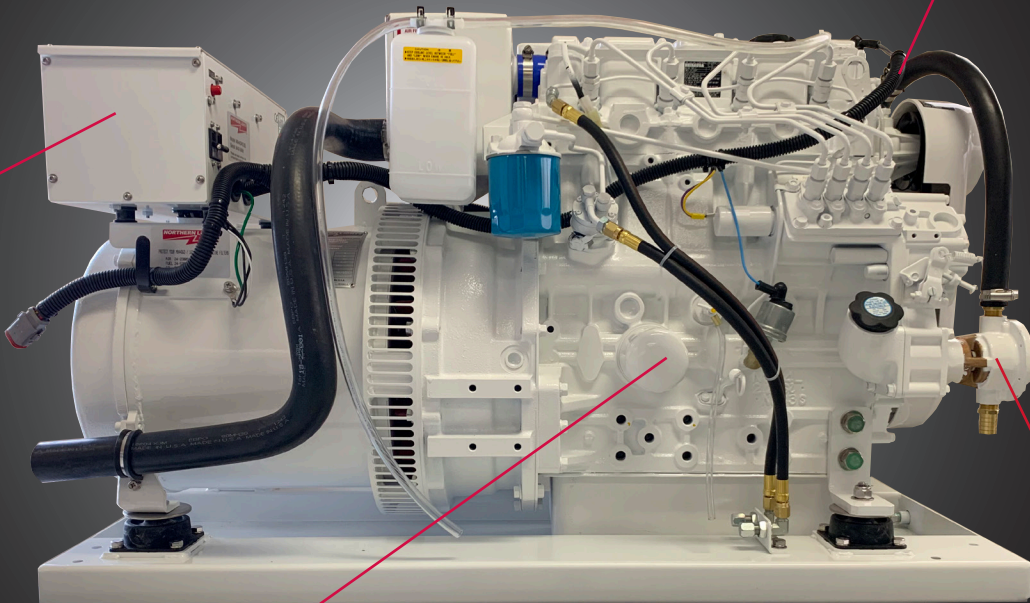


- One-piece heat exchanger, expansion tank and liquid cooled exhaust manifold. Cast iron to resist corrosion and electrolysis
  - Replaceable heat exchanger element
  - DC system uses reliable relays instead of an unrepairable printed circuit board
  - Full flow, spin-on oil filter with bypass
  - Gear driven seawater pump
- 

## SPECIFICATIONS AND DIMENSIONS

### AC Output<sup>1</sup>

|                    |  |
|--------------------|--|
| <b>20 KW</b>       | 60 Hz, 1800 RPM, 1 Ph, 1.0 PF, 120/240 V/83.3 A, 120 V/167 A |
| <b>16 KW</b>       | 50 Hz, 1500 RPM, 1 Ph, 1.0 PF, 220 V/72.7 A                  |
| Optional           | Three Phase with 0.8 PF                                      |
| Voltage regulation | ±1%  |

1. Based on SAE J1995 and ISO 3046.

### Weight and Height

|                        |                   |
|------------------------|-------------------|
| Approximate dry weight | 948 lbs (430 kg)  |
| Length                 | 43.7 in (1111 mm) |
| Width                  | 19.5 in (494 mm)  |
| Height                 | 27.5 in (697 mm)  |
| Sound enclosure weight | 90 lbs (41 kg)    |
| Enclosure length       | 46.0 in (1169 mm) |
| Enclosure width        | 22.5 in (573 mm)  |
| Enclosure height       | 29.5 in (750 mm)  |

### Engine Data

|                                     |                                   |
|-------------------------------------|-----------------------------------|
| Type                                | Vertical inline 4 cylinder diesel |
| Displacement                        | 135 in <sup>3</sup> (2.2 ltr)     |
| Bore/Stroke                         | 3.30/3.90 in (84/100 mm)          |
| HP @ RPM                            | 32/1800 26/1500                   |
| Approximate fuel use <sup>2</sup> : |                                   |
| 1800 RPM @ full load                | 1.70 gph (6.50 lph)               |
| 1800 RPM @ half load                | 1.00 gph (3.90 lph)               |
| 1500 RPM @ full load                | 1.36 gph (5.20 lph)               |
| 1500 RPM @ half load                | 0.80 gph (3.00 lph)               |

2. Actual fuel consumption will vary depending on operating conditions.

### Installation Data

|                   |                   |
|-------------------|-------------------|
| Wet exhaust elbow | 2 inch (51 mm) OD |
| Raw water inlet   | 3/4 in (19 mm) OD |
| Fuel inlet        | 5/16 - 37T JIC    |
| Fuel return       | 1/4 - 37T JIC     |



**MECTRA**  
S Y N E R G Y

**M844LW3G**  
20 kW (60 Hz, 1800 rpm)  
16 kW (50 Hz, 1500 rpm)

## FEATURES AND BENEFITS

|                             |  |
|-----------------------------|--|
| <b>Engine Block</b>         | Four cycle, 4 cylinder, liquid cooled, naturally aspirated, overhead valve diesel with glow plugs for quick starting. Swirl combustion chambers improve fuel efficiency and reduce smoke.  |
| <b>Cooling System</b>       | Standard heat exchanger cooling with optional keel cooling. Copper-nickel, tube-type heat exchanger has removable rubber end caps for easy cleaning, and no need for zincs. The bronze and stainless steel seawater pump with rubber impeller is gear driven, eliminating a potential failure point.   |
| <b>Fuel System</b>          | The self-venting fuel system features an inline injection pump with 3-5% mechanical governor for close AC frequency control. Stop solenoid acts directly on the fuel rack eliminating linkage problems. The fuel lift pump is mechanical with a hand primer, eliminating electronic pump failures.   |
| <b>Intake and Exhaust</b>   | The M844LW3G meets US EPA Tier III emission standards. Its cast aluminum intake manifold with Sound Maze system reduces noise, and its washable air cleaner makes routine maintenance simple. The wet exhaust elbow is stainless steel.  |
| <b>Lubrication System</b>   | The closed crankcase vent system traps oil vapor and keeps engine room clean. 8.6 qt (8.2 ltr) oil capacity for better lubrication and 200 hour oil change intervals. Oil drain hose with valve plumbed to base pan as standard.   |
| <b>DC Electrical System</b> | The DC System features a 12 volt starter motor and battery charging alternator with belt guard. The set is equipped with a standard remote mount control panel, featuring an hour meter, stop-start switch, engine gauges, a preheat switch, and includes a 20 foot (6m) harness. The standard panel can be expanded to six panels, up to 110 feet from the set. Gauges include oil pressure, coolant temperature and DC Voltage. Low oil pressure, high coolant temperature and high exhaust temperature safety shutdowns standard. |
| <b>AC Generator</b>         | The Northern Lights, direct coupled, four pole, four lead generator has Class "H" insulation, a pre-lubricated bearing and features a conservative heat rise rating of 95°C/50°C ambient. Our automatic voltage regulator gives you ±1% voltage regulation. The AVR protected by a dedicated circuit breaker.  |