

## Specifications and Dimensions

AC Output <sup>1</sup>	
<b>25 kW</b>	60 Hz, 1800 RPM, 1 Ph, 1.0 PF, 120-240 V/104.1A, 120 V/208.3A
<b>20 kW</b>	50 Hz, 1500 RPM, 1 Ph, 1.0 PF, 220 V/90.9 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	993 lbs (450 kg)
Length	52.9 in (1350 mm)
Width	24.2 in (696 mm)
Height	26.5 in (672 mm)
Sound enclosure weight	140 lbs (64 kg)
Enclosure length	52.9 in (1350 mm)
Enclosure width	24.2 in (696 mm)
Enclosure height	27.7 in (672 mm)

Engine Data	
Type	Vertical inline 4 cylinder diesel
Displacement	152 in <sup>3</sup> (2.5 ltr)
Bore/Stroke	3.40/4.20 in (86/107 mm)
HP @ RPM	39/1800 33/1500
Approximate fuel use <sup>2</sup> :	
1800 RPM @ full load	2.23 gph (8.40 lph)
1800 RPM @ half load	1.17 gph (4.40 lph)
1500 RPM @ full load	1.78 gph (6.73 lph)
1500 RPM @ half load	0.93 gph (3.52 lph)

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

Installation Data	
Wet exhaust elbow	3 inch (76 mm) OD
Raw water inlet	3/4 inch (19 mm) OD
Fuel inlet and return	1/4 inch NPT

## Features and Benefits

**Engine Block** - Four cycle, 4 cylinder, liquid cooled, naturally aspirated, overhead valve diesel with glow plugs for quick starting. The forged carbon-steel crankshaft is stronger than cast iron while the cross flow head makes for more efficient breathing. Helical cut and ground, carbon steel timing and PTO gears reduce noise.

**Cooling System** - Standard heat exchanger cooling with optional keel cooling. Cupro-nickel, tube-type heat exchanger has removable ends for easy cleaning. Electrolysis protection via zinc anode. Rubber impeller seawater pump is gear driven eliminating a potential fail point.

**Fuel System** - The self-venting fuel system features a Bosch type injection pump with 5% mechanical governor for close AC frequency control and pintle injectors with replaceable tips. Stop solenoid acts directly on the fuel rack eliminating speed variances and linkage problems. The fuel pump is mechanical with a hand primer, eliminating electronic pump failures.

**Intake and Exhaust** - The M864W3 meets and exceeds US EPA Tier III emission standards. Its cast aluminum intake manifold reduces intake noise and its washable air cleaner makes routine maintenance simple. The wet exhaust elbow is cast iron for safety.

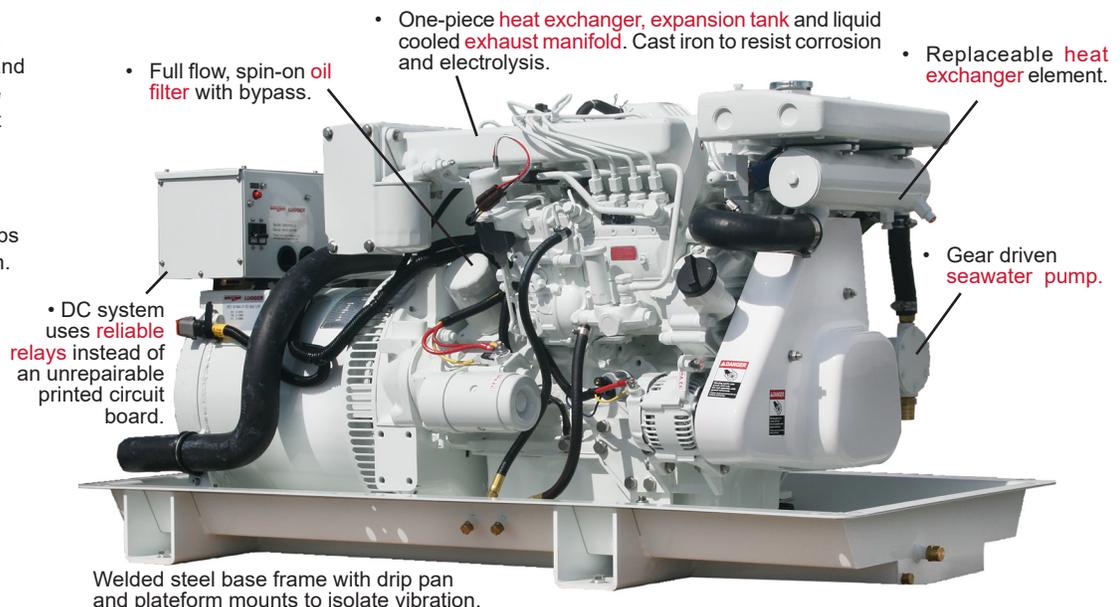
### Lubrication System -

The closed crankcase vent system traps oil vapor and keeps engine room clean. 6.9 qt (6.5 ltr) oil capacity for better lubrication and 200 hour oil change intervals.

**DC Electrical System** - The DC System is powered by a 12 volt starter motor and battery charging alternator with belt guard. The set is equipped with a standard S-3C remote mount control panel, featuring an hour meter, stop-start switch with run light and a preheat switch. Gauges include oil pressure, coolant temperature and DC voltage. The standard panel can expand to six panels up to 110 feet from the set, while the 20 foot (6m) plug-in panel harness lets you mount your panel anywhere onboard. Low oil pressure, high coolant temp and high exhaust temp safety shutdowns standard.

**AC Generator** - The Northern Lights, direct coupled, four pole, revolving field, four lead re-connectable generator has Class "H" insulation and a pre-lubricated bearing and features a conservative heat rise rating of 95°C/50°C ambient. Our external automatic voltage regulator is powered by a dedicated AC winding for true 300% short circuit protection.

Consult factory for classification society compliance.



[www.northern-lights.com](http://www.northern-lights.com)

Dealer

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