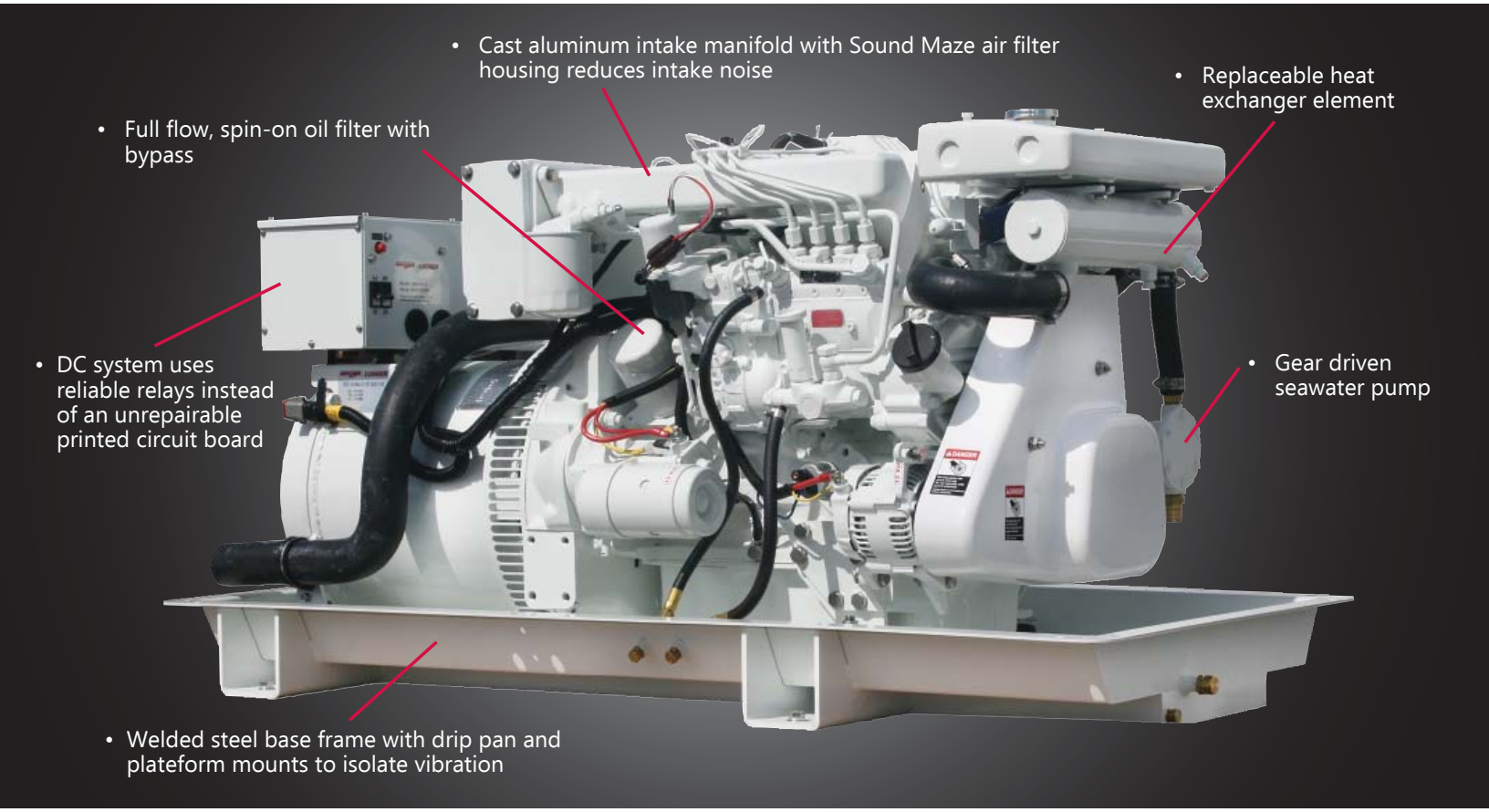
NORTHERN LIGHTS®

M864W3

25 kW (60 Hz, 1800 rpm)
20 kW (50 Hz, 1500 rpm)



SPECIFICATIONS AND DIMENSIONS

AC Output[1]

25 KW	60 Hz, 1800 RPM, 1 Ph, 1.0 PF, 120/240 V/104.1 A, 120 V/208.3 A
20 KW	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 (704 mm)

Engine Data

Type	Vertical inline 4 cylinder diesel
Displacement	152 in^3 (2.5 ltr)
Bore/Stroke	3.40/4.20 in (86/107 mm)
HP @ RPM	39/1800 33/1500
Approximate fuel use [2]:	
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 in (19 mm) OD
Fuel inlet and return	1/4 inch NPT

Consult factory for classification society.

US EPA Tier III

Information and dimensions are subject to change without notice.

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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 whole the cross flow head makes for more efficient breathing. Helical cut gear train reduces noise.
Cooling System	Standard heat exchanger cooling with optional keel cooling. Copper-nickel, tube-type heat exchanger has removable end caps for easy cleaning. Electrolysis protection via zinc anode. The bronze and stainless steel seawater pump with rubber impeller is gear driven, eliminating a potential failure point.
Fuel System	The self-venting fuel system features an inline injection pump with 3-5% mechanical governor for close AC frequency control. The fuel lift pump is mechanical with a hand primer, eliminating electronic pump failures.
Intake and Exhaust	The M864W3 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.
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. Oil drain hose with valve plumbed to base pan as standard.
DC Electrical System	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 temperture and DC Voltage. Low oil pressure, high coolant temperature and high exhaust temperature safety shutdowns standard.
AC Generator	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.

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