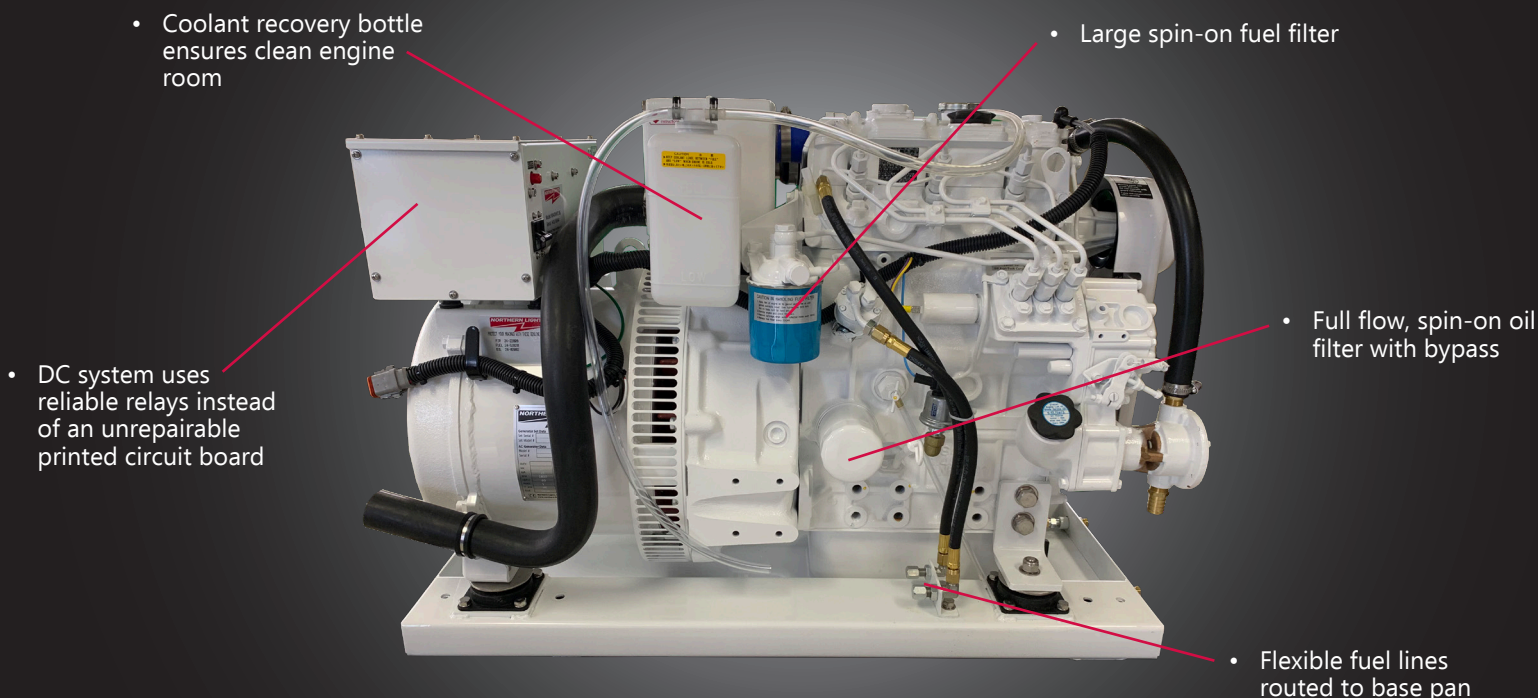




SPECIFICATIONS AND DIMENSIONS

AC Output¹

12 KW	60 Hz, 1800 RPM, 1 Ph, 1.0 PF, 240 V/50 A, 120 V/100 A
--------------	--

10 KW	50 Hz, 1500 RPM, 1 Ph, 1.0 PF, 220 V/45.4 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	797 lbs (355 kg)
------------------------	------------------

Length	38.5 in (977 mm)
--------	------------------

Width	19.0 in (482 mm)
-------	------------------

Height	25.2 in (641 mm)
--------	------------------

Sound enclosure weight	53 lbs (24 kg)
------------------------	----------------

Enclosure length	38.8 in (986 mm)
------------------	------------------

Enclosure width	22.6 in (574 mm)
-----------------	------------------

Enclosure height	25.8 in (655 mm)
------------------	------------------

Engine Data

Type	Vertical inline 3 cylinder diesel
------	-----------------------------------

Displacement	91 in ³ (1.5 ltr)
--------------	------------------------------

Bore/Stroke	3.30/3.50 in (84/90 mm)
-------------	-------------------------

HP @ RPM	20/1800 17/1500
----------	-----------------

Approximate fuel use ²:

1800 RPM @ full load	1.20 gph (4.50 lph)
----------------------	---------------------

1800 RPM @ half load	0.62 gph (2.30 lph)
----------------------	---------------------

1500 RPM @ full load	1.00 gph (3.78 lph)
----------------------	---------------------

1500 RPM @ half load	0.51 gph (1.93 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

M843NW3G

12 kW (60 Hz, 1800 rpm)

10 kW (50 Hz, 1500 rpm)

FEATURES AND BENEFITS

Engine Block	Four cycle, 3 cylinder, liquid cooled, naturally aspirated, overhead valve diesel with glow plugs for quick starting. Swirl combustion chambers improve fuel efficiency and reduce smoke.
Cooling System	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.
Fuel System	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 external linkage problems. The fuel lift pump is mechanical with a hand primer, eliminating electronic pump failures.
Intake and Exhaust	The M843NW3G 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. 4.2 qt (4.0 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 with run light and 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. Low oil pressure, high coolant temperature and high exhaust temperature safety shutdowns are 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.