

NORTHERN LIGHTS



M864K Marine Diesel Generator

The M864K combines brute power with state-of-the-art features to give you a solid yet compact package that's backed by the Northern Lights name. Exceptionally reliable, clean, and quiet, the M864K makes your time on board relaxed and comfortable.

The M864K's Luger engine delivers premium performance and unmatched reliability. This four-cylinder, naturally aspirated diesel engine includes a wide assortment of components including indirect fuel injection, a cupro-nickel heat exchanger element, and gear-driven raw water pump. Running at 1800 rpm (60 Hz) or 1500 rpm (50 Hz), the M864K operates smoothly with minimal stress on the engine.

The brushless generator end handles challenging loads such as electric motor starting, air conditioners, refrigerators, and water makers with ease. The rotor, exciter, and stator are coated in corrosion-resistant epoxy for protection against the severe marine elements. The hand-wound, skewed stator makes electricity with a symmetrical sine wave that today's electrical equipment demands.

Single-side servicing, spin-on oil and fuel filters, and an easy-to-reach air filter make routine maintenance quick and easy. Northern Lights' revolutionary DC Logic System continuously controls and monitors vital engine functions and makes troubleshooting both quick and easy. You'll also find a plug-in wire harnesses, four-gauge control panel, and a durable, gleaming white polyurethane finish for added longevity.

The M864K was developed for quiet operation. A double-wall oil pan and an isolated rocker arm cover contain noise at the source. Likewise, a noise maze air intake silencer increases noise attenuation while captive isolation mounts limit transmission of vibration to the rest of the vessel. For added comfort and enjoyment, install an optional Northern Lights sound enclosure – the industry leader in noise attenuation technology.

25 kW

60 Hz / 1800 RPM

20 kW

50 Hz / 1500 RPM

STANDARD FEATURES

■ Engine Block

Four-cylinder, liquid cooled, naturally aspirated, overhead valve diesel. Swirl combustion chambers improve fuel efficiency and reduce smoke. Glow plugs for quick cold starting.

■ Cooling System

Freshwater cooling in heat exchanger or keel cooled configuration. Cooling with cupro-nickel tube-type heat exchanger. Jabsco gear-driven raw water pump.

■ Fuel System

Self-venting fuel system. Bosch-type injection pump with 5% mechanical governor. Pintle injectors with replaceable tips. Reliable mechanical fuel lift pump with hand primer. Large spin-on fuel filter. Flexible fuel lines routed to base. Fuel shut-off solenoid.

■ Intake and Exhaust

Cleanable dry-type air cleaner in cast aluminum, noise attenuating intake manifold. Cast-iron wet exhaust elbow.

■ Lubrication System

Full flow, spin-on oil filter with bypass. 6.9 quart, 6.6 liter oil capacity. Oil drain for quick, clean oil changes.

■ DC Electrical System

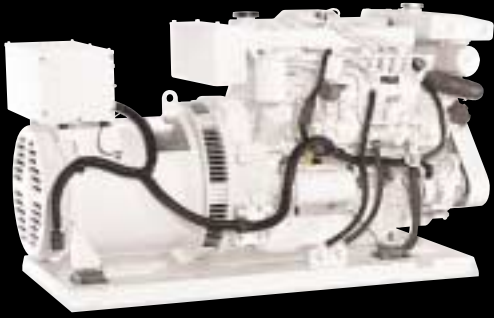
DC Logic System. 12-volt starter motor and battery charging alternator with integrated regulator and belt guard. Remote mount S-3C panel with hourmeter, oil pressure gauge, coolant temperature gauge, DC voltmeter, stop-start switch, and preheat switch. 20-foot (6 meter) plug-in wire harness. Low oil pressure, high exhaust temperature, and high coolant temperature safety shutdowns.

■ AC Generator

Reliable and robust brushless 50 or 60 Hz direct coupled AC generator rated at 90° C rise. 4 lead/1 phase, 50 or 60 Hz AC power output. Skewed stator, accessible diodes, and oversized bearing. Voltage regulated to $\pm 1\%$ no load to full load. AVR circuit breaker overload protection.



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25 kW
60 Hz / 1800 RPM

20 kW
50 Hz / 1500 RPM

OPTIONS & ACCESSORIES

- Sound Enclosure
- Front PTO
- Additional Control Panels
- Wire Harness Extensions
- Wet Exhaust Muffler
- Exhaust / Water Separator
- Dry Exhaust
- Onboard Parts Kits
- 24-Volt System
- Isolated Ground DC Electrical Systems
- Fuel Filter / Water Separators
- Fuel Line Kits for Inspected Vessels
- Shorepower Switches
- Overspeed Shutdowns

WARRANTY & SUPPORT

This generator is backed by an unmatched, transferable global warranty. Northern Lights' worldwide dealer network is more than 300 strong, and Northern Lights' helpful dealers offer parts, accessories, and service in more than 40 countries. Visit our web site at www.northern-lights.com to locate the dealer nearest you.

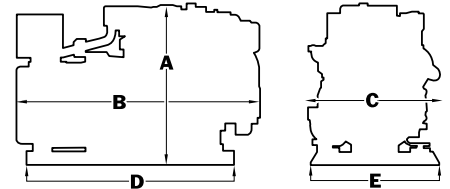
60 Hz / 1800 rpm ¹	25 kW
50 Hz / 1500 rpm ¹	20 kW
Phase	1 standard (3 optional)
Power Factor	1.0 standard (0.8 @ 3 phase)
Volts/Amps	120-240V / 104A (60 Hz) 120V / 208A (60 Hz) 220V / 90.9A (50 Hz)
Voltage Regulation	±1%

ENGINE DATA	
Type	Vertical Inline Diesel
Aspiration	Natural
Cylinders	4
Bore	3.40 in (86 mm)
Stroke	4.20 in (107 mm)
Displacement	152 cid (2.49 ltr)
Horsepower	39.4 hp @ 1800 rpm 33.0 hp @ 1500 rpm

APPROX. FUEL RATE	
1800 rpm / full load ²	2.23 gph (8.4 lph)
1800 rpm / half load ²	1.17 gph (4.4 lph)
1500 rpm / full load ²	1.78 gph (6.73 lph)
1500 rpm / half load ²	0.93 gph (3.52 lph)

- NOTES:**
1. Based on SAE J1995 and ISO 3046.
 2. Actual fuel consumption varies depending on operating conditions.

DIMENSIONAL DATA	
A - Height	26.9 in (683 mm)
B - Length	47.0 in (1194 mm)
C - Width	20.8 in (528 mm)
D - Base Length	42.1 in (1070 mm)
E - Base Width	19.3 in (490 mm)
Approx. Dry Weight	930 lbs (422 kg)



INSTALLATION DATA	
Wet Exhaust Elbow	3 in (76 mm) OD
Raw Water Inlet	3/4 in (20 mm) OD
Fuel Inlet & Return	1/4 in NPT

Standard Panel:
Remote mount S-3C with hourmeter, oil pressure gauge, coolant temperature gauge, DC voltmeter, stop-start switch, and preheat switch.



Sound Enclosure Dimensions – Length x Width x Height:
53.2 in x 27.4 in x 28.9 in (1351 mm x 695 mm x 734 mm)

ENGINEERED FOR SILENCE

With a newly refined line-up of sound enclosures, experience why Northern Lights continuously raises marine industry standards. Dual sound-dampening barriers ensure optimum sound absorption, and damper-sheet-coated internal air ductings keep your generator quiet and cool. Easy-to-use trigger latches allow quick access and easy maintenance. The construction features rigid, powder-coated aluminum for an extraordinarily robust, corrosion-resistant enclosure that compliments any engine room. For the quietest and most reliable power in the marine industry, choose Northern Lights.



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