Northern Lights

M984W

33 kW
60 Hz / 1800 RPM

26 kW
50 Hz / 1500 RPM

"It's a beast. It has run forever and I can't throw too much load on it."

That is what you might hear from an M984 owner about his generator set. As the manufacturer we have to say this high praise is not technically correct. An M984 will not quite run forever and it is rated at 33 kW.

What makes it so strong? The Lugged 684 diesel. At nearly 3.5 liters, this four-cylinder has the displacement to shoulder the big job. It has an industrial block designed for a 2500 max rpm instead of a 1600 rpm automotive engine. At 1800 rpm it is at the top of its torque curve instead of sliding down the backside of it. It even has replaceable cylinder liners so after years of service it can be rebuilt. Again and again.


Making AC is not all the M984 can do for you. Add an 80 Amp DC alternator and you'll never run out of battery power again. Need hydraulic power? Add a front PTO with an electric clutch. At a touch of a switch you have up to 42 HP at 1800 rpm for winches, bow thrusters and dock gear.

For all its power, the 984 has remarkable manners. It is smooth, quiet and fuel efficient as only a direct injected diesel can be. Add a super insulated sound enclosure with a water exhaust separator muffler and your harbor mates will never know there is a "beast" in your bight.

Featuring new W-Series generator

The new W-Series generator and is a major step in our constant quest to give you the best generator set on the market. It features an auxiliary starter winding that supplies separate and stable power to the Automatic Voltage Regulator (AVR). The results are impressive:

- Class A noise compliance.
- Fuel use 30% over current capability.
- Improved AC circuit breaker performance.

See your dealer for more information.
M984W Specifications and Dimensions

**M984W - 33 kW/26 kW**

**AC Generator**
- 33 kW, 50 Hz, 1500 RPM, 1 Ph, 1.0 PF
- 26 kW, 50 Hz, 1500 RPM, 1 Ph, 1.0 PF
- Optional, 250 V/115 A

**Lugger LM04 Engine**
- Type: Vertical inline 4 cylinder diesel
- Displacement: 212 in³ (3.47 l)
- Bore/Stroke: 3.55 × 4.00 in (90.15 × 101.56 mm)
- HP @ RPM: 50 @ 1800
- Approx. fuel use:
  - 1800 RPM @ full load: 2.6 gph (9.9 l/h)
  - 1800 RPM @ half load: 1.4 gph (5.3 l/h)
  - 1500 RPM @ full load: 1.96 gph (7.4 l/h)
  - 1500 RPM @ half load: 1.1 gph (4.1 l/h)

**Installation Data & Weight**
- Assist exhaust elbow: 3 in (76 mm) OD run
- Raw water inlet: 3/4 in (19 mm) OD run
- Fuel inlet and return: 1/4 in NPT run
- Approximate dry weight: 1219 lbs (553 kg)

**M984W Features and Benefits**

**Engine Block**
- Lugger four-cylinder, liquid-cooled, naturally aspirated, water-cooled marine diesel engine based on an industrial engine block.
- Cylinder liners for long life and reliability.
- Crankcase in induction hardened, forged steel, stronger than cast iron.
- Helical cut end ground, carbon steel timing and PTO gears reduce noise.
- Cross flow head for efficient breathing.
- Laminated steel oil pan reduces noise.

**Cooling System**
- Freshwater cooling system in heat exchanger or keel cooled configuration.
- Large, easy fill expansion tank.
- Cast iron exhaust manifold is freshwater cooled for safety. Non-tox, dry exhaust.
- Zinc anode electrolysis protection.
- Heat exchanger cooling includes: Easy to clean, lube type, copper-nickel heat exchanger. Impeller seawater pump of bronze and stainless steel is accessible. Gear driven pump has no belt to worry about.

**Fuel System**
- Fuel system is self-venting.
- Direct injection for economy, clean exhaust and fast starting.
- Bosch-type in-line injection pump with 5% mechanical governor for class AC output frequency control.
- Hole type injectors. Reversible fuel.
- Mechanical fuel lift pump with hand primer.
- Large spin-on fuel filter.
- Fuel lines routed to base.
- Stop solenoid controls fuel rack, not throttle, for fast engine shutdowns.

**Lubrication System**
- Full flow, spin-on oil filter with bypass.
- 9.5 g (0.35 oz) center wall oil pint.
- 90 g (3.2 oz) oil drain for quick oil change.

**Intake and Exhaust**
- Meets US EPA emission requirements at date of manufacture.
- Washable air cleaner/silencer in cast intake manifold reduces intake noise.
- Cast iron, wet exhaust elbow for safety.

**DC Electrical System**
- DC system uses reliable relays instead of unreliable printed circuit board.
- 12 volt starter and battery charging shunt with regulator.
- Standard panel:
  - Remote mount
  - Siren, horn
  - Oil pressure gauge, coolant temperature gauge, voltmeter.
  - Stop, start switch and push pull switch.
  - 20 ft (6 m) plug-in panel harness lets you monitor your set from the bridge.
  - Expandable to six panels, 110 ft from set.
  - Low oil pressure, high coolant temp and high exhaust temp shut-downs are standard.

**AC Generator**
- Northern Lights, direct coupled, brushless AC generator is maintenance free.
- 6 lead 1 phase, 50 or 60 Hz output standard.
- 12 wires, 3 phase generator available.
- Conservative 59°C/132°F ambient heat rise.
- Generator features, high quality Class "H" insulation, accessibleroc, oversize bearings and junction box for AC wiring.
- Automatic Voltage Regulator is powered by dedicated AC winding for true 200% short circuit capability. AVR trips quick. "Ts" RMS no load to full load voltage regulation. AVR has circuit breaker protection.

**Special Equipment**
- Winch and steel base frame with drip pan.
- Throttle, sparkling white polyurethane paint for smooth, quiet operation.
- Belt guard protects operator.
- Touch, sparkling white polyurethane paint.
- Parts and operator's manuals.

**Classification Standards**
- Contact factory for details.

**Optional Equipment**
- See accessory brochure for complete list of customizing equipment.
- Front Power Take Off: Spline 2 or 4 bolt, from PTO with 12 or 24 volt electric clutch.
- Take up to 42 HP @ 1800 rpm to run your bow thruster, spiral handling, door window and other shipboard hydraulic equipment.
- Sound Enclosure has powder coated marine aluminum panels lined with sound barrier lamin to dampen noise. Trigger latches for easy service access.

**Overall Dimensions L x W x H:** 54.57 x 23.41 x 28.7 inch (1386 x 594.5 x 726.4 mm)

Dimensions given in inches (mm). Dimensions subject to change without notice. Contact dealer, or visit www.northern-lights.com for most current installation drawings.

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**Notes:**
- On sale J998 and J946. 2. Actual fuel consumption will vary depending on operating conditions.

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**Dealer**

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www.northern-lights.com