

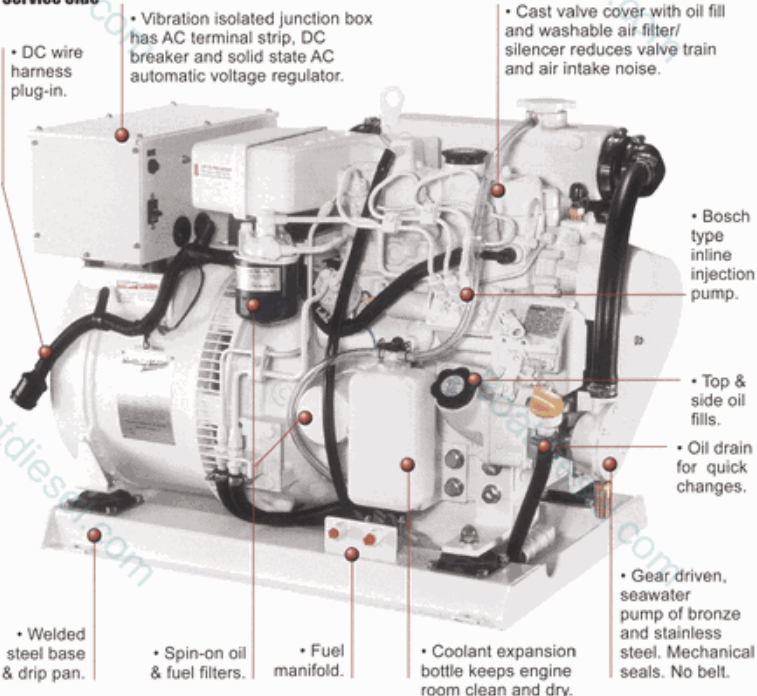
8 kW

60 Hz / 1800 RPM

6 kW

50 Hz / 1500 RPM

Service Side



- DC wire harness plug-in.

- Vibration isolated junction box has AC terminal strip, DC breaker and solid state AC automatic voltage regulator.

- Cast valve cover with oil fill and washable air filter/ silencer reduces valve train and air intake noise.

- Bosch type inline injection pump.

- Top & side oil fills.

- Oil drain for quick changes.

- Gear driven, seawater pump of bronze and stainless steel. Mechanical seals. No belt.

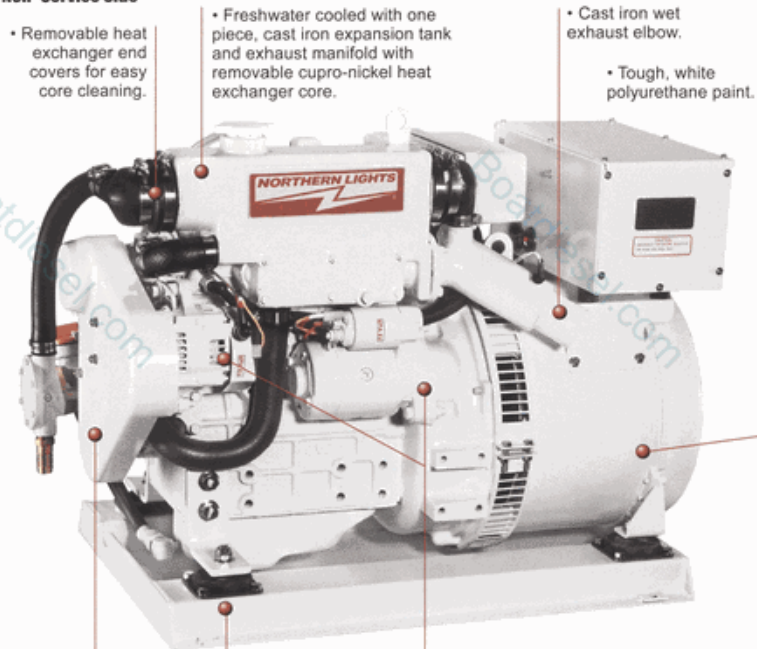
- Welded steel base & drip pan.

- Spin-on oil & fuel filters.

- Fuel manifold.

- Coolant expansion bottle keeps engine room clean and dry.

Non-Service Side



- Removable heat exchanger end covers for easy core cleaning.

- Freshwater cooled with one piece, cast iron expansion tank and exhaust manifold with removable cupro-nickel heat exchanger core.

- Cast iron wet exhaust elbow.

- Tough, white polyurethane paint.

- Beltguard for safety.

- Platform vibration mounts for smooth operation.

- 12 volt DC starter and battery charging alternator.

- Extensive use of stainless steel fasteners.

Proof That Even The Best Can Be Improved.

Much of the Northern Lights reputation for reliability and simplicity is based on the 8 kW, M753. Year in, year out, this bulletproof workhorse has been a favorite for yachtsmen and commercial operators for both repowers and new vessel construction. It has constantly been improved and we are now proud to introduce the newest version; the M753W.

1800 RPM Lugger Diesel

The set is still powered by a 58 cubic inch Lugger diesel which runs at 1800 rpm instead of 3600. Lower speed promotes engine life by reducing internal stresses.

The engine has a mono-component, cast iron, freshwater cooling system to reduce troublesome gaskets and hoses.

Smooth And Quiet.

Being a three cylinder, the engine is balanced for smooth operation. This along with vibration isolation mounts, intake silencer system and cast valve cover make the M753W remarkably smooth and quiet with or without a sound enclosure.

Simple To Operate.

The M753W is simple to maintain. All service points are on one side within easy reach. The seawater pump's location makes impeller changes a snap and it is gear-driven, so no belts.

The engine's DC electrical system and safety shutdowns use reliable relays instead of delicate, unrepairable printed circuit boards. If a failure should occur you simply plug in a new, inexpensive relay.

The M753W; being the best never goes out of style.

Featuring new W-Series generator

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

- Classification society compliance.
- Real 300% short circuit capability.
- Improved AC circuit breaker performance.

See your dealer for more information.

AC Output¹

8.0 kW 60 Hz, 1800 RPM, 1 Ph, 1.0 PF,
120-240 V/33.3A, 120 V/66.6A
6.5 kW 50 Hz, 1500 RPM, 1 Ph, 1.0 PF,
220 V/27.3A

Optional Three Phase with 0.8 PF
Voltage regulation ±1%

Lugger 1753 Engine

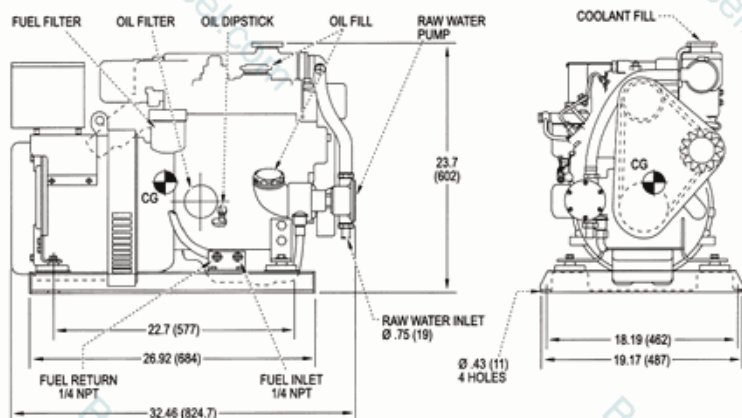
Type Vertical inline 3 cylinder diesel
Displacement 58 in³ (0.95 ltr)
Bore/Stroke 2.95/2.83 in (75/72 mm)
HP @ RPM 13.5/1800 11.1/1500
Approx. fuel use
1800 RPM @ full load² 0.94 gph (3.6 lph)
1800 RPM @ half load² 0.52 gph (1.9 lph)
1500 RPM @ full load² 0.77 gph (2.9 lph)
1500 RPM @ half load² 0.39 gph (1.5 lph)

Installation Data & Weight

Wet exhaust elbow 2 inch (51 mm) OD
Raw water inlet 3/4 inch (19 mm) OD
Fuel inlet and return 1/4 inch NPT
Approximate dry weight 529 lbs (240 kg)

1. Based on SAE J1995 and ISO 3046. 2. Actual fuel consumption will vary depending on operating conditions.

M753W Dimensional Drawing



Overall Dimensions L x W x H: 32.46 x 19.17 x 23.7 inch (824.7 x 487 x 602 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.

M753W Features and Benefits

Engine Block

- Four cycle, 3 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 cooling configuration.
- One-piece heat exchanger, expansion tank and liquid cooled exhaust manifold. Fewer troublesome hoses and gaskets. Cast iron to resist corrosion and electrolysis.
- Heat exchanger cooling is standard. Tube-type, cupro-nickel heat exchanger has removable ends for easy cleaning. Accessible, gear driven, rubber impeller seawater pump of bronze and stainless steel; no belt.

Fuel System

- Fuel system is self-venting.
- Injection pump with 5% mechanical governor for close AC frequency control.
- Pintle injectors with replaceable tips.
- Mechanical lift pump with hand primer. No electric pump to fail.
- Large spin-on fuel filter.
- Flexible fuel lines routed to fuel manifold.
- Stop solenoid controls the fuel rack, not throttle, to eliminate speed variance and linkage problems.

Intake and Exhaust

- Meets EPA emission requirements at date of manufacture.
- Washable air cleaner in cast intake manifold reduces intake noise.
- Cast iron, wet exhaust elbow for safety.

Lubrication System

- Full flow, spin-on oil filter with bypass.
- 5.5 qt. (5.2 ltr) oil capacity for better lubrication. 200 hr oil change intervals.
- Oil drain for quick, clean oil changes.

DC Electrical System

- DC system uses reliable relays instead of unrepairable printed circuit board.
- 12 volt starter motor and battery charging alternator with regulator and belt guard.
- Standard panel: Remote mount S-1B has hour meter, stop-start switch with turn light and preheat switch.
- Expandable to 6 panels up to 110 feet from the set.
- 20 foot (6 m) plug-in panel harness lets you mount your panel anywhere onboard. Better than inaccessible unit mount panels that are prone to vibration.
- Low oil pressure, high coolant temperature and high exhaust temperature safety shutdowns standard.



AC Generator

- Northern Lights, direct coupled, brushless AC generator is maintenance free. 4 lead-1 phase 50 or 60 Hz output standard. 12 lead-3 phase optional. Conservative heat rise rating: 95°C/50°C ambient.
- Automatic Voltage Regulator is powered by dedicated AC winding for true 300% short circuit capability. Quick ±1% RMS no load to full load voltage regulation. AVR has circuit breaker protection

- Generator features high quality, Class "H" epoxy insulation, accessible diodes, oversized bearings and junction box for wiring.

Special Equipment

- Welded steel base frame with drip pan.
- Four platform mounts isolate vibration.
- White, long-life polyurethane paint.
- Operator's and parts manuals standard.

Classification Standards

- Contact factory for details.



Optional Equipment

- Control panels with DC gauges.
- AC and DC control panels.
- 24 volt isolated ground DC system.
- Wire harness extensions and "Y" harness.
- 2 inch wet exhaust muffler.
- Exhaust / water separator.
- Dry exhaust elbow.
- Keel cooling configuration.
- Onboard parts kits.
- Fuel filter-water separators.
- Shorepower switches.
- Alarms/shutdowns for low coolant level, low oil level, raw water flow and overspeed.
- Sound enclosure has powder coated aluminum panels lined with sound barrier foam to dampen noise. Trigger latches for easy access.



LxWxH: 39.3 x 25.7 x 25.3 in
(998.7 x 652 x 643 mm)
Weight: 92.5 lbs (42 kg)

Dealer

4420 14th Ave. NW., Seattle WA 98107

Tel: (206) 789-3880 • 1-800-762-0165

Fax: (206) 782-5455

Information and dimensions subject to change without notice.

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