

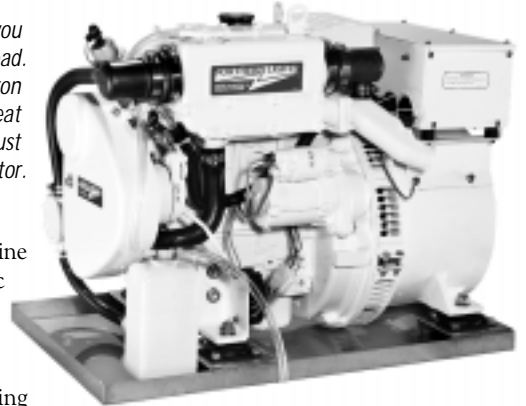
**Fewer RPMs,  
longer life for  
your genset.**

The new Northern Lights M673L is everything you want in a generator set, and nothing you don't. At a 6.0 kW (5.0 kW for 50 Hz) it's the right size; big enough to run many shipboard items and start sizable motors, yet small enough to fit into tight engine rooms.

The M673L runs at 1800 rpm (60Hz), not 3600 like sets built to a slightly smaller envelope or to a slightly smaller price. That slower speed means quiet, smooth operation and much less stress on the engine. During 2000 hours of operation the M673L will turn over 216 million fewer revolutions. Its pistons will travel 43,337 fewer miles. Its cylinders will withstand 108 million fewer detonations. Now, which engine do you think will last longer? So do we.

Today's sophisticated on-board electronic equipment requires "clean" power. Disruption or distortion of that supply can play havoc with these devices. With the M673L, an additional

*No service points on this side lets you install the set close to a bulkhead. Features: Liquid cooled cast iron exhaust elbow. One-piece, cast iron heat exchanger, expansion tank and exhaust manifold. 12 volt starter and alternator.*



winding helps create and maintain a clean sine wave. The independently powered automatic voltage regulator further protects electronic equipment while enabling large electric motor starting.

The M673L's cast-iron freshwater cooling system and gear driven seawater pump minimize troublesome belts, hoses and gaskets. Polyurethane paint and a stainless steel drip pan help prevent corrosion and keep the engine room clean.

Four platform isolation mounts reduce vibration, keeping the on-board environment smooth and quiet. The M673L is so quiet many owners opt to do without a soundshield, but for maximum attenuation there is a highly effective optional powder coated aluminum soundshield. Northern Lights are so efficient, they're naturally environmentally friendly and meet current emissions standards. This keeps things clean, both on-board and for your neighbors.

The M673L's service points are all located on one side. Not only can the unit be mounted close to a bulkhead, but once in place, regular maintenance is simple and convenient. Northern Lights' unique D.C. logic system means that the owner can troubleshoot and repair the D.C. power system easily. A 30 amp AC circuit breaker in the junction box gives short circuit protection. Safety shutdowns for low oil pressure, high water temperature and high exhaust temperature are standard.

In short, the M673L is what you'd expect from Northern Lights, everything that's important to keeping the power on.

- Junction box contains AC terminal strip, DC breaker, 30 amp AC circuit breaker and solid state AC automatic voltage regulator.
- Cast valve cover with oil fill and washable air filter/silencer. Reduces valve train noise.
- Bosch-type in-line injection pump with hand primer.
- Freshwater cooled with one piece, cast iron heat exchanger, expansion tank and exhaust manifold.
- Removable heat exchanger end covers for easy cleaning.
- Beltguard.
- Battery charging 12 volt alternator.
- Top and side oil fills.
- Gear driven, Jabsco seawater pump with ceramic seals.
- Oil drain for quick, clean oil changes.
- Northern Lights reconnectable direct coupled generator.
- DC wire harness with plug-ins protected by plastic loom.
- Spin-on oil and fuel filters.
- Four platform vibration mounts for smooth operation.
- Sparkling white Polyurethane paint for high visibility.
- Welded stainless steel base with integral drip pan. Acts as base for sound enclosure.

## M673L Specifications

### AC Output<sup>1</sup>

6.0 kW.....	60 Hz, 1800 RPM, 1 Ph, 1.0 PF, 120-240 V/25 A, 120 V/50 A
5.0 kW.....	50 Hz, 1500 RPM, 1 Ph, 1.0 PF, 220 V/22.7 A

Voltage regulation ..... ±5%

### Lugger L673 Engine

Type .....	Vertical inline 3 cylinder diesel
Displacement .....	46.4 in <sup>3</sup> (.761 ltr)
Bore/Stroke .....	2.64/2.83 in (67/72mm)
HP @ 1800 RPM .....	10.1
Approx. fuel use @ full load <sup>2</sup> ....	0.63 gph (2.4 lph)
@ half load <sup>2</sup> .....	0.4 gph (1.4 lph)

### Installation Data

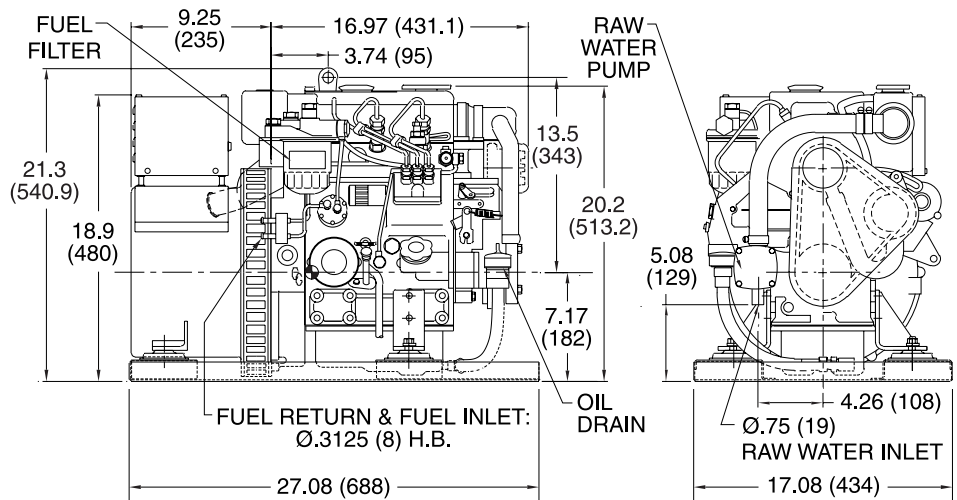
Wet exhaust elbow .....	1.5" (38mm) OD
Raw water inlets .....	0.75" (20mm) OD
Fuel inlet and return .....	5/16" ID Hose

### Weight

Approx. wet weight ..... 350 lbs (158.7 kg)

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

## Dimensional Data



Main dimensions given in inches (mm). Dimensions subject to change without notice.

## M673L Features and Benefits

### Engine Block

- Lugger, 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 system.
- One-piece heat exchanger, expansion tank and liquid cooled exhaust manifold. Fewer troublesome hoses and gaskets. Cast iron to resist corrosion and electrolysis.
- Zinc anode electrolysis protection.
- Heat exchanger cooling is standard. Removeable tube-type heat exchanger has removable ends for easy cleaning. Jabsco seawater pump of brass and stainless steel is gear driven; no belts to break.
- Keel cooling configuration optional.

### 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.
- Steel fuel lines.
- Stop solenoid controls the fuel rack, not throttle, to eliminate speed variance and linkage problems.

### Intake and Exhaust

- Meets EPA Tier One and CARB emission requirements.
- Cleanable air cleaner in cast intake manifold

reduces intake noise.

- 1-1/2 inch water lift muffler and exhaust water separator are optional.
- Cast iron, wet exhaust elbow for safety. Dry exhaust elbow is optional.

### Lubrication System

- Full flow, spin-on oil filter with bypass.
- 3 qt. oil capacity for better lubrication and 200 hour oil change intervals.
- Oil drain for quick, clean oil changes.
- Closed crankcase vent system keeps engine room clean.

### DC Electrical System

- 12 volt starter motor and battery charging alternator with integrated regulator. Belt guard.
- Standard panel: Remote mount S-1B has hour meter, stop-start switch with run light and preheat switch.
- Optional: Remote mount S-3C panel has gauges for oil pressure, water temperature, hours and DC volts. S-4 panel has engine gauges and AC meters.
- 20 foot plug-in panel harness lets you mount your panel anywhere onboard. Better than inaccessible unit mount panels that are prone to vibration problems. Harness extensions and Ys for multi-panel systems are available.
- Low oil pressure, high water temperature and high exhaust temperature safety shutdowns standard.



### AC Generator

- Northern Lights direct coupled, 4 pole, revolving field, 4 lead reconnectable generator with Class H insulation and prelubricated bearing. Conservative 95°C/50°C ambient heat rise rating.
- External automatic voltage regulator gives you ±5% voltage regulation. This "clean" power protects sensitive electronic equipment. AVR powered by dedicated AC winding for improved motor starting.
- AVR and mainline circuit breakers protect generator from AC overloads and shorts.
- 30 Amp circuit breaker for AC system short circuit protection.

### Special Equipment

- Stainless steel base frame with drip pan. Easy to mount. Keeps engine room clean.
- Four platform mounts isolate vibration.
- White polyurethane paint for long-life finish and service visibility.
- Operator's and parts manuals standard.

### Sound Enclosure

Powder coated marine aluminum panels lined with barrier foam deaden noise yet allow easy service access.

Weight:

51 lbs (23 kg).

L 28.52 (724) x W 18.64 (474) x H 22.26 (565).



## Dealer:



Manufactured by: Alaska Diesel Electric, Inc.

P.O. Box 70543, Seattle, WA 98107

Tel: (206) 789-3880 • 1-800-762-0165 • Fax: (206) 782-5455

Web: [www.northern-lights.com](http://www.northern-lights.com) • E-mail: [ade@northern-lights.com](mailto:ade@northern-lights.com)

Information, specifications, materials and dimensions subject to change without notice. © 2001 All rights reserved. Litho in USA. L597 2/01