# This 9 kw is state-of-the-art and the right size.

The M773LK incorporates the best of Northern Lights into one compact and versatile package. Rated at 9 kW in its 60 Hz configuration and 7 kW in its 50 Hz configuration, the M773LK is big enough for many onboard tasks, yet small enough to fit comfortably in most vessels. It meets growing onboard power demands without asking for a lot of engine room space.

The M773LK was engineered to deliver its power at a quiet, long lasting 1800 rpm. Driven by a high-torque Lugger diesel and fitted with a powerful brushless copper-heavy generator, the M773LK starts electric motors with ease. Naturally clean and efficient, the M773LK meets current and foreseeable emissions requirements.

Like all Northern Lights, simplicity and longevity are the focal points. Hoses and belts have been eliminated wherever possible.

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

A gear-driven sea water pump and a one-piece heat exchanger/expansion tank/exhaust mainfold mean greater reliablity and a simpler package. The new closed system crankcase vent recirculates vapor emissions back into the combustion process, keeping the engine room, and environment, cleaner.

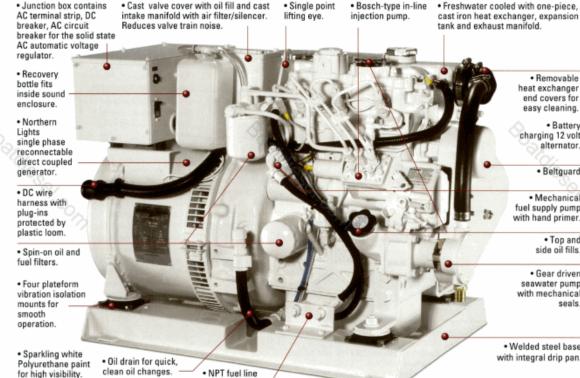
The M773LK features single-side service, which means it can be mounted with one side facing a bulkhead without compromising routine service access. It also means service is simple and easy.

Other proven systems are utilized throughout. The DC logic system utilizes simple relay logic. Low oil pressure, high coolant temperature and high exhaust temperature safety shutdowns are standard. An automatic voltage regulator keeps voltage to within +/- 1%. Anti-vibration plateform mounts, gleaming white polyurethane paint

and plug-in wire harness complete the ready-to-work package.

Northern Lights accessories can make this extraordinary genset perfect for a particular application. From the state-of-the-art sound enclosure to additional control panels, special needs can be accommodated. A worldwide dealer network ensures that service assistance will be available.

Small in size but big in features, the 9 kW Northern Lights represents the state-of-the-art in high quality power generation.



connections.

 Removable heat exchanger end covers for

easy cleaning.

 Battery charging 12 volt alternator.

Beltguard

 Mechanical fuel supply pump with hand primer.

> Top and side oil fills.

 Gear driven seawater pump with mechanical seals.

· Welded steel base with integral drip pan.

## M773LK Specifications

#### AC Contact

| ue enbene |        |        |        |       |         |
|-----------|--------|--------|--------|-------|---------|
| 9.0 kW    | 60 Hz, | 1800   | RPM,   | 1 Ph, | 1.0 PF, |
|           | 120-24 | IO V/3 | 7.5 A, | 120 V | /75 A   |
| 7.0 kW    | 50 Hz, | 1500   | RPM,   | 1 Ph, | 1.0 PF, |
|           | 220 V/ | 31.8 / | ٨      |       |         |

# Voltage regulation.

### Lugger L773L Engine

| Туре          | . Vertical inline 3 cylinder diesel |
|---------------|-------------------------------------|
| Displacement  | 69 c.i.d. (1.13 ltr)                |
| Bore/Stroke   | 3.03/3.19 in (77/81mm)              |
| HP @ 1800 RPM | l 15.0                              |
|               | @ full load? 0.93 aph (3.52 lph)    |

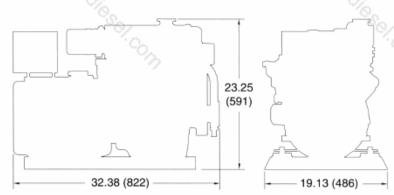
# @ half load2... 0.48 gph (1.8 lph)

#### Installation Data

| Wet exhaust elbow     | 2.0" | (51 | mm  | 00   |
|-----------------------|------|-----|-----|------|
| Raw water inlet       | 3/4" | (20 | lmm | 00 ( |
| Fuel inlet and return |      | 1   | /4" | NPT  |
| Meluka                |      |     |     |      |

Approx. wet weight ...... 512 lbs (232 kg) 1. Based on SAE J1995 and ISO 3046. 2. Actual fuel consumption may vary depending on operating conditions.

# Dimensional Data



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

### M773LK Features and Benefits

#### **Engine Block.**

- · Lugger, four cycle, 3 cylinder liquid cooled, naturally aspirated, overhead valve diesel.
- Swirl combustion chambers improve emissions and reduce noise.
- · Glow plugs for quick starting.

#### Cooling System.

- · Freshwater cooling in heat exchanger or keel cooled configuration with thermostatic temperature control.
- · One-piece heat exchanger, expansion tank and exhaust manifold. Troublesome hoses and gaskets are minimized. The cast iron construction resists corrosion, electrolysis and overheating better than aluminum castings used on some competitive sets.
- Heat exchanger cooling includes: Easy to clean, tube-type heat exchanger. Raw water pump of bronze and stainless steel. Pump is mounted for easy access and is gear driven. No belts to fail.

#### Fuel System.

- Fuel system is self venting.
- Bosch-type injection pump with 3-5% mechanical governor for close AC output frequency control.
- Pintle injectors with replaceable tips.
- . Mechanical fuel supply pump with hand primer. No electric pump to fail.
- · Large spin-on fuel filter.
- Flexible fuel lines routed to base for easy connection to fuel system.
- · Stop solenoid controls fuel rack, not throttle. Eliminates speed variance.

#### Intake and Exhaust.

- · Cleanable dry-type air cleaner in cast intake manifold reduces intake noise.
- Cast iron, wet exhaust elbow for safety. Dry exhaust elbow optional.
- · 2 inch water lift muffler optional.

#### Lubrication System.

- · Full flow, spin-on oil filter with bypass.
- · 4.2 quart, 4 liter oil capacity.
- · Oil drain for quick, clean oil changes.

#### DC Electrical System.

- System uses reliable relays instead of unrepairable printed circuit board.
- 12 volt starter motor and 12 volt battery charging alternator with integrated regulator
- and belt guard. Standard panel: Remote mount S-1B with hour meter, stop-start switch with run light and preheat switch.



- 20' (6 meter) plug-in panel harness lets you monitor your set from the bridge. Better than inaccessible unit mount panels that are prone to vibration problems. Harness extensions and Ys for multi-panel systems are available.
- Shutdowns for low oil pressure, high water temperature and high exhaust temperature.

#### AC Generator.

- · Northern Lights direct coupled, brushless AC generator is maintenance free.
- · 4 lead/1 phase 50 or 60 hertz AC power output standard. 12 lead/3 phase optional.
- · Generator features: high quality epoxy insulation, accessible diodes, oversized

bearing and junction box for AC wiring.

- · Automatic voltage regulator gives quick response to load changes. Voltage regulated to ± 1% RMS no load to full load.
- · AVR circuit breaker protects your generator from overload damage.
- Class H insulation

#### Special Equipment.

- . Steel base frame with drip pan. Easy to mount. Keeps engine room clean.
- · Four point vibration mounts isolate vibration for smooth, quiet operation.
- · White polyurethane paint for a long-life finish and service visibility.
- Operator's and parts manuals standard.

#### Classification Standards.

• The M773LK is built to major classification society standards. Consult factory for details.



#### Optional Equipment.

See separate brochure for complete line of optional and accessory equipment for your set.

- . Optional panels: Remote mount S-3C has gauges for oil pressure, water temperature, hours and DC voltage. S-4 panel has engine gauges and AC meters.
- Shutdown for overspeed.
- Stainless steel exhaust elbow.
- · Wet and dry exhaust mufflers.
- Keep your fuel clean and dry with a Northern Lights fuel filter.
- · Sound enclosures maximize your onboard comfort. Powder coated

aluminum panels lined with foam deaden noise and allow easy access.





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 • E-mail: ade@northern-lights.com Information, specifications, materials and dimensions subject to change

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