M843NW3 Specifications and Dimensions

**M843NW3 - 12 kW/10 kW**

<table>
<thead>
<tr>
<th>AC Output</th>
<th>12 kW</th>
<th>10 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>60 Hz</td>
<td>50 Hz</td>
</tr>
<tr>
<td>RPM</td>
<td>1800</td>
<td>1500</td>
</tr>
<tr>
<td>Voltage</td>
<td>120-240 V/50A, 120 V/100A</td>
<td>220 V/45.4A</td>
</tr>
<tr>
<td>Power</td>
<td>9.0 kW</td>
<td>7.0 kW</td>
</tr>
<tr>
<td>Transmission</td>
<td>3600</td>
<td>3000</td>
</tr>
<tr>
<td>Fuel Use</td>
<td>1.20 gph (4.50 lph)</td>
<td>0.62 gph (2.30 lph)</td>
</tr>
<tr>
<td>Weight</td>
<td>838 lbs (380 kg)</td>
<td>670 lbs (304 kg)</td>
</tr>
</tbody>
</table>

**Lugger L843N Engine**

- **Type**: Vertical inline 3 cylinder diesel
- **Displacement**: 91 in³ (1.5 ltr)
- **Bore/Stroke**: 3.30/3.50 in (84/90 mm)
- **HP @ RPM**: 20.1/1800, 16.8/1500

**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**: 837 lbs (380 kg)

1. Based on SAE J1960 and ISO 3046
2. Actual fuel consumption will vary depending on operating conditions

**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 system in heat exchanger or keel cooled 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. Cupro-nickel tube-type heat exchanger has removable ends for easy cleaning. Rubber impeller seawater pump of bronze and stainless steel is gear driven, 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 the throttle, to eliminate speed variances and linkage problems.

**Intake and Exhaust**

- Meets US EPA Tier III emission standards 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.
- 4.2 qt (4 ltr) oil capacity for better lubrication. 200 hour oil change intervals.
- Oil drain for quick, clean oil changes.
- Closed crankcase vent system traps oil vapor and keeps engine room clean.

**DC Electrical System**

- DC system uses reliable relays instead of an unreparable 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 run light and preheat switch.
- Expandable to six panels up to 110 feet from the set.
- 20 foot (6m) plug-in panel harness lets you mount your panel anywhere onboard. Better than inaccessible unit mount panels that are prone to vibration problems.
- Low oil pressure, high coolant temp and high exhaust temp 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 (AVR) is powered by dedicated AC winding for true 300% short circuit capability and circuit breaker protection. Quick 1% RMS no load to full load voltage regulation.
- Generator features high quality, Class “H” epoxy insulation, accessible diodes, over-sized 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**

- Consult factory for details.

**M843NW3 Overall Dimensions**

- **L x W x H**: 39.4 x 22.8 x 25.2 inch (1000 x 580 x 641 mm)

**Sound Enclosure Dimensions**

- **L x W x H**: 39.4 x 22.8 x 25.7 inch (1000 x 580 x 654 mm)

**Sound Enclosure Weight**: 75 lbs. (34 kg)

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

Contact dealer or visit www.northern-lights.com for most current installation drawings.

**M843NW3 Features and Benefits**

- Closed crankcase vent system traps oil vapor and keeps engine room clean.
- 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
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