

38 kW (60 Hz, 1800 rpm, 3ph) 36 kW (60 Hz, 1800 rpm, 1ph)

# **SPECIFICATIONS AND DIMENSIONS**

| AC Output <sup>1</sup>    |                              |
|---------------------------|------------------------------|
| 38 kW/36 kW               | 60 Hz, 1800 RPM              |
|                           | 3 Phase: 120/208 VAC, 132 A  |
|                           | 105 Amp, 3 Phase, unity P.F. |
|                           | 1 Phase: 120/240 VAC, 150 A  |
| Phase/Power Factor        | Std: 3/0.8 (Opt 1/1.0)       |
| Voltage regulation        | ±1%                          |
| 4 5 4 645 44005 4500 0046 |                              |

<sup>1.</sup> Based on SAE J1995 and ISO 3046.

# **Lugger L944T3F Engine Data**

| Туре                    | Vertical inline 4 cylinder diesel |
|-------------------------|-----------------------------------|
| Displacement            | 203 in <sup>3</sup> (3.3 ltr)     |
| Bore/Stroke             | 3.70/4.72 in (94/120 mm)          |
| HP @ RPM                | 60/1800                           |
| Approximate fuel use 2: |                                   |
| 1800 RPM @ full load    | 3.26 gph (12.34 lph)              |
| 1800 RPM @ half load    | 1.6 gph (6.05 lph)                |
|                         |                                   |

<sup>2.</sup> Actual fuel consumption will vary depending on operating conditions.

## **Installation Data**

| Dry exhaust elbow       | 3 inch (76 mm) OD |
|-------------------------|-------------------|
| HE Raw water inlet      | .75 in (19 mm) OD |
| KC coolant inlet/outlet | 1.65 x 1.5 in OD  |
| Fuel inlet & return     | .31 in (8 mm) NPT |

# \*Optional PTO shown

# Weight and Height

| Approximate dry weight | 1500 lbs (680 kg) |
|------------------------|-------------------|
| Length                 | 59.8 in (1519 mm) |
| Width                  | 25.8 in (655 mm)  |
| Height                 | 41.0 in (1042 mm) |

Information and dimensions are subject to change without notice.

## FEATURES AND BENEFITS

**ENGINE BLOCK** - Four cycle, 4 cylinder, liquid cooled, dry turbocharged overhead valve diesel. The induction hardened, forged carbon steel crankshaft is stronger than cast iron while the cross flow head makes for more efficient breathing. Helical cut and ground, carbon steel timing and PTO gears reduce noise.

**COOLING SYSTEM** - Standard keel cooling. Cast aluminum expansion tank with coolant recovery type filler cap. Thermostat for quick warm up and safety. Cast iron exhast manifold has two pass jacket-water flow for even temperature.

**FUEL SYSTEM** - Easy to service mechanical, direct injection fuel system. Spin on fuel filters with air bleed. Mechanical fuel transfer pump with manual priming plunger.

**INTAKE & EXHAUST** - The M38C3F is fully compliant with the US EPA Tier III emission standards. Its dry air filter silences intake noise.

**LUBRICATION SYSTEM** - Full-flow, spin-on filter with bypass. 10.5 qt (10 ltr) center well oil pan. Closed crankshaft vent system keeps oil vapor inside engine room.

**DC ELECTRICAL SYSTEM** - The DC system uses reliable relays instead of unrepairable circuit boards. 12 volt system includes circuit breaker, starter motor and alternator regulator.

**CONTROLS** - Standard flush mount S-3C control panel has hour meter, oil pressure gauge, coolant temperature gauge, DC voltmeter, stop-start switch and preheat switch. Expandable up to six panels, up to 110 feet from the set. Low oil pressure and high coolant temperature shutdowns are standard.

**AC GENERATOR-** The Northern Lights, direct coupled, four pole, twelve lead reconnectable generator has Class "H" insulation, a pre-lubricated bearing and features a conservative heat rise rating of 95°C/50°C ambient. Engines and generators are torsionally matched for long life. Automatic Voltage Regulator (AVR) gives quick +/-1% RMS no load to full load voltage regulation.

**SPECIAL EQUIPMENT** - Northern Lights Commercial Series gensets are made for the demands of the marine environment, with features including a rugged, welded steel base frame, captive vibration isolation mounts and a belt guard for operator protection

ACCESSORIES & OPTIONAL EQUIPMENT - Match your generator set to your job requirements. Optional equipment includes front power take-off (PTO) with 12 or 24v electric clutch and SAE B spline providing up to 58 HP. Heat exchange cooling is available with 3 inch wet exhaust. Add a dry muffler with 18" SS flex. Alarms or shutdowns can be installed for low oil level, raw water flow and overspeed.