

ENGINE BLOCK

- US EPA Tier III compliant.
- Four cylinder, four cycle, in-line, liquid cooled, overhead valve, marine diesels based on heavy-duty industrial engine blocks.
- Balanced, forged crankshaft with induction hardened journals and rolled fillets for long life.
- Replaceable, wet cylinder liners for long life and low rebuild costs.
- Bimetallic valves with chrome stems and rotators.
- Replaceable valve seats and guides.
- Three ring aluminum alloy pistons with Ni-Resist insert for the top ring. Keystone piston ring reduces carbon buildup under light loads.
- A single poly-vee drive belt powers the alternator and jacket-water pump.

FUEL SYSTEM

- High pressure common rail fuel injection for smooth, clean delivery.
- Direct fuel injection system.
- Ring clamp fuel filters with air bleed and drain.
- Diaphragm-type, mechanical fuel transfer pump with manual priming lever.

LUBRICATION SYSTEM

- Positive displacement gear-type oil pump.
- Full flow, spin-on oil filter.
- Oil spray cooling reduces piston crown temperature.
- Jacket-water, plate-type, full flow oil cooler reduces heat and prevents lube oil breakdown.
- Large capacity oil pan.
- A closed loop crankcase vent traps oil vapor to keep the engine room clean.

AIR SYSTEM

- Dry air filter silences intake noise.
- Turbocharger with jacket water cooled turbine housing for safety.

COOLING SYSTEM

- Keel cooled with heat exchanger option.
- Gear driven sea water pump with self-priming flexible impeller. Bronze with stainless steel shaft.
- Cast iron expansion tank.
- Two thermostats for quick warm-ups and safety.
- Cast-iron exhaust manifold for reliable temperature control.

ESP AND DC ELECTRICAL SYSTEM

- Negative ground, 12 volt DC system has circuit breaker, starter motor and alternator with regulator.
- Low oil pressure and high coolant temperature safety shutdowns.
- Optional control panels help you specify the amount and type of information required. Comprehensive list of optional alarms and safety shutdowns.
- Optional DC logic system for simplified maintenance.
- Optional pre-wired engine, panel with terminal strips.

AC GENERATOR

- Direct coupled, single bearing, 12 lead, reconnectable AC generator. Maintenance free brushless design.
- All NL generators meet or exceed class society standards with Class "H" insulation, accessible diodes, oversized ball bearings, marine grade shafts and conservative 90°/50° heat rise ratings.
- Engines and generators are torsionally matched for long life.
- Automatic voltage regulator; ±0.5% regulation over the entire range from no load to full load.
- Configured for 0% isochronous droop with integral electronic governor control supplied by ECU.

SPECIAL EQUIPMENT

- PMG option for 300% short circuit protection.
- Welded steel base frame.
- Sparkling white IMRON® polyurethane paint.
- Operator's and parts manuals.
- Optional sound enclosure for industry best sound and vibration attenuation in a compact design.

× Prime kW ratings for 3Ø at 0.8 power factor. Consult factory for deration factors.
 ✓ Based on prime kW rating at 1800 and 1500 RPM. Fuel rate may vary depending on operating conditions.

AC Output[×]

60 Hz, 1800 RPM¹ kW

Voltage regulation
 Frequency droop control
 Phase and power factor

Generator full load temperature rise

Lugger Diesel Engine Data

Inline cylinders/aspiration/operating cycle
 Displacement - cid (liter)
 Bore/stroke - inches (mm)
 Fuel injection pump type and control

Cooling System (Keel cooling standard, heat exchanger optional)

Heat rejection to jacket water -1800 rpm BTU min
 Freshwater pump capacity - 1800 rpm/gpm (lpm)
 KC approximate cooling capacity - gal (ltr)
 HE approximate cooling capacity - gal (ltr)
 Seawater pump capacity - 1800 rpm/gpm(lpm)
 Max seawater pump suction head lift - ft (m)
 Sea water pump inlet hose ID - in (mm)
 Min. seawater inlet/discharge thru-hull - in (mm)

DC Electrical (12V standard, 24V optional)

DC starting voltage - standard (optional)
 Min battery capacity - amp hr/12V CCA (24V CCA)
 Starter rolling amps @ 0°C - 12VDC (24VDC)
 12 Volt battery cable size up to 10 ft (3m)

Air

Air consumption - 1800 rpm/cfm (m³/m)
 Approx heat radiated to air - 1800 rpm/BTU/min
 Generator cooling air flow 1&3Ø - 1800 rpm cfm
 Exhaust gas volume - 1800 rpm/cfm (m³/m)
 Exhaust gas temp - 1800 rpm/F° (C°)
 Max. exhaust back pressure - inch H²O (mm H²O)
 Wet exhaust elbow OD- in (mm)
 Dry exhaust elbow in (mm)

Fuel

Fuel injection pump type and control
 Min suction - in (mm)
 Min return line - in (mm)
 Max fuel transfer pump suction lift - ft (m)
 Max fuel flow to transfer pump at 1800 rpm - gph
 Specific fuel consumption max load 1800 rpm - lbs.hp.hr
 Approx. fuel rate ✓ at 1800 RPM full load - gph (lph)
 Fuel supply and return- max pressure PSI. Height - ft (m)
 Fuel supply and return. Height - ft (m)

Max Engine Operating Angle

Continuous (with separate expansion tank)
 Intermittent (2 minutes)

Dimensions and Weight - Low Profile Do not use for installation. Contact factory for installation drawings and info.

Length - inches (mm)
 Width - inches (mm)
 Height - inches (mm)
 Weight - pounds (kilograms)

Dimensions and Weight - w/optional enclosure Do not use for installation. Contact factory for installation drawings and info.

Length - inches (mm)
 Width - inches (mm)
 Height - inches (mm)
 Weight - pounds (kilograms)

M65T13L

65 kW

0.5%
 Isochronous 0%
 Three phase 0.8 power factor std.
 Opt.: Single phase -1.0 power factor
 90°C temperature rise at 50°C ambient

I-4 / Turbocharged/ 4

276 (4.5)
 4.19/5 (106/127)
 Electronic (HPCR)

4,548

30.9 (117)
 4.5 (17)
 3.7 (14)
 24 (91)
 10 (3)
 1.25 (32)
 1.25 (32)

12 (24)
 200/1100 (750)
 920 (600)
 2/0

215 (6.1)
 596
 700
 521 (14.7)
 846 (452)
 30 (762)
 4 (102)
 4 (102)

High Pressure Common Rail
 3/8 (10)
 3/8 (10)
 7.9 (2.4)
 19.5
 0.394
 5.5 (20.8)
 2.9
 7.9 (2.4)

30°
 45°

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Information and dimensions subject to change without notice.

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