

## SPECIFICATIONS AND DIMENSIONS

### AC Output\*

<b>60 Hz, 1800 RPM* kW</b>	<b>200 kW</b>
Voltage regulation	1.5%
Frequency droop control	Isochronous 0%
Standard three phase power factor	-0.8
Optional single phase power factor	-1.0
Generator full load temperature rise (at 50°C ambient)	110°C
Inline cylinders/operating cycle**	I-6 / 4
Aspiration	Turbo & Aftercooled
Displacement - cid (liter)	549 (9.0)
Bore/stroke - inches (mm)	4.6/5 (118/127)
Fuel injection pump type and control	Electronic (HPCR)
Oil fill capacity - gal (ltr)	4.7 (18)

### Cooling System (Keel cooling standard, heat exchanger optional)

Heat rejection to jacket water - 1800 rpm BTU min	10,530
Standard cooling type	Keel cooling
Optional cooling type	Heat exchange
Freshwater pump capacity - 1800 rpm/gpm (lpm)	74.6 (282)
KC heat exchanger approx cooling capacity - gal (ltr)	11.5 (43.5)
KC turbo tube length @ 85°F seawater dockside - ft	Consult factory
KC steel skin cooler @ 85°F seawater dockside - sq ft	Consult factory
KC keel cooler head diameter - in NPT	Consult factory
KC keel cooler hose ID discharge/suction - in (mm)	Consult factory
HE seawater pump capacity - 1800 rpm/gpm(lpm)	73 (276)
HE max seawater pump suction head lift - ft (m)	10 (3)
HE sea water pump inlet hose ID - in (mm)	2.5 (63.5)
HE min. seawater inlet/discharge thru-hull - in (mm)	2.5 (63.5)

### DC Electrical

DC starting voltage - standard	24
Min battery capacity - amp hr	255/750
Starter rolling amps @ 0°C	600
Battery cable size up to 10 ft (3m)	210

### Air (Based on standard three phase)

Air consumption - 1800 rpm/cfm (m³/m)	533 (15.1)
Approx heat radiated to air - 1800 rpm/BTU/min	2710
Generator cooling air flow 1&3Ø - 1800 rpm cfm	1020
Exhaust gas volume - 1800 rpm/cfm (m³/m)	1402 (39.7)
Exhaust gas temp - 1800 rpm/F° (C°)	943 (506)
Max. exhaust back Pressure - inch H²O (mm H²O)	30 (762)
Dry exhaust elbow OD- in (mm)	4 (102)
Wet exhaust elbow OD- in (mm)	6 (152)

### Fuel

Fuel injection pump type and control	HPCR
Min suction - in (mm)	3/8 (10)
Max fuel transfer pump suction lift - in (mm)	80 (2032)
Max fuel flow to transfer pump at 1800 rpm - gph	63.4 (240)
Specific fuel consumption max load 1800 rpm - lbs.hp.hr	0.351
Approx. fuel rate³ at 1800 RPM full load - gph (lph)****	14.7 (55.5)

### Max Engine Operating Angle

Continuous (with separate expansion tank)	20°
Intermittent (2 minutes)	30°

### Dimensions and Weight

Length - inches (mm)	97.5 (2745)
Width - inches (mm)	37.3 (947)
Height - inches (mm)	45.5 (1156)
Weight - pounds (kilograms)	4263 (1935)

## FEATURES AND BENEFITS

**ENGINE BLOCK** - Lugger six 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 have 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. Torsional crankshaft dampers help ensure smooth operation. 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 systems. Canister fuel filters include drain and sensors for low fuel pressure and water-in-fuel. Electric Fuel transfer pump with automatic priming.

**LUBRICATION SYSTEM** - Positive displacement gear-type oil pump. Full flow, spin-on oil filter. Oil spray cooling reduces piston crown temperature for longer life. 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 housings for safety. Jacket water aftercooler provides optimized combustion and output. No second keel cooler needed.

**COOLING SYSTEM** - Heat exchanger cooling: Cupronickel, tube type heat exchanger with removable ends for easy cleaning. Gear driven, beltless, flexible impeller, sea water pump is bronze and stainless steel.

**COOLING SYSTEM CONT'D**- Cast expansion tank with brass filler neck. Two thermostats for quick warm-ups and safety. Cast-iron exhaust manifold has two pass jacket-water flow for even temperature control. Keel cooled configuration standard, optional heat exchanger configuration.

**DC ELECTRICAL SYSTEM** - Electronic System Profiler (ESP) supplies an SAE J1939 data stream through a CANbus plug. Optional engine monitor screen. Negative ground, 12 volt DC system has circuit breaker, starter motor and alternator with regulator. Relay board and senders for gauged panels standard. Standard S-3C remote control panel with engine hour meter, coolant temperature gauge, oil pressure gauge, DC voltage meter, start-stop and shutdown bypass switches. Additional optional panels help you specify the amount and type of information delivered. Reliable, relay based DC system is easy to trouble shoot and repair. Up to 6 panels can be used up to 110 feet from set. Low oil pressure and high coolant temperature safety shutdown system. Pre-wired engine, panel with terminal strips.

**AC GENERATOR** - Direct coupled, single bearing, 12 lead, re-connectable 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 110°/50° heat rise ratings. Engines and generators are torsionally matched for long life. Automatic voltage regulator; ±1.5% regulation over the entire range from no load to full load. Configured for isochronous frequency control with ECU electronic governor control.