M200A13L

200 kW (60 Hz, 1800 rpm)
175 kW (50 Hz, 1500 rpm)

FEATURES AND BENEFITS

ENGINE BLOCK - EPA Tier III and IMO Tier II compliant. Six cylinder, inline, 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 liners for long life and low rebuild costs. Bimetallic calves 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 rings reduces carbon buildup under light loads. Torsional crankshaft dampers help ensure smooth operation. A single ploy-vee drive belt powers the alternator and jacket water pump. Gear -driven coolant pump.

FUEL SYSTEMS
High pressure common rail fuel injection for smooth, clean delivery. Direct fuel injection system. Canister fuel filters include drain and sensors for low fuel pressure and water-in-fuel. Electric fuel pump integrated into primary fuel filter. Computer controlled priming for ease of operation.

LUBRICATION SYSTEM
Positive displacement gear-type oil pump. Jacket water, plate-type, full flow oil cooler reduces heat and prevents lube oil breakdown. Large capacity oil pan. 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. Jacket water aftercooler provides optimized combustion and output. No second keel cooler needed.

COOLING SYSTEM
Heat exchanger cooling with optional keel cooled. Gear-driven seawater pump with self-priming flexible impeller. Bronze with stainless steel shaft. Cast-iron expansion tank with brass filler neck. Two thermostats for quick warm-ups and safety. Cast-iron exhaust manifold has a jacket water flow for even temperature control.

ESP AND DC ELECTRICAL SYSTEM
ESP supplies an SAE J1939 data stream through a CANbus plug. Optional engine monitor screen. Negative ground, 24 volt DC system has a circuit breaker, starter motor, and alternator with regulator. Relay board and senders for gauged panels standard. Standard S-3B 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. Low oil pressure and high coolant temperature safety shutdown system.

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 95°/50° heat rise ratings. Engines and generators are torsionally matched for long life. Automatic voltage regulator, ± 1% 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
Welded steel base frame.
Sparkling white polyurethane paint.
Operator's and parts manuals.
Optional sound enclosure for industry best sound and vibration attenuation in a compact design.

AC Output	M200A13L	M200A13L
60 Hz, 1800 RPM, kW	**200 kW**	
50 Hz, 1500 RPM, kW		**175 kW**
Voltage Regulation	1%	1%
Frequency Droop Control	Isochronous 0%	
Phase and Power Factor	Three Phase 0.8 Power Factor std.	
Generator Full Load Temp. Rise	95°C Temperature Rise at 50°C Ambient	
Lugger Diesel Engine Data		
Inline Cylinders/Aspiration/Operating Cycle	I-6/Turbo & Aftercooled/4	
Displacement - in^3 (ltr)	549 (9.0)	549 (9.0)
Bore/Stroke - in (mm)	4.65/5.35 (118/136)	4.65/5.35 (118/136)
Oil Fill Capacity - gal (ltr)	5 (19)	5 (19)
Cooling System - Heat Exchange Standard, Keel-Cooling Optional		
Heat Rejection to Jacket Water - BTU min	13945	12522
Freshwater Pump Capacity - gpm (lpm)	88.2 (334)	70.8 (268)
Heat Exchanger Approx. Cooling Capacity - gal (ltr)	11.1 (42)	11.1 (42)
Seawater Pump Capacity - gpm (lpm)	93 (352)	79 (299)
Max. Seawater Pump Suction Head Lift - ft (m)	9.8 (3)	9.8 (3)
Seawater Pump Inlet Hose ID - in (mm)	2.5 (63.5)	2.5 (63.5)
Min. Seawater Inlet/Discharge Thru-Hull - in (mm)	2.5 (63.5)	2.5 (63.5)
DC Electrical		
DC Starting Voltage - standard	24	24
Min. Battery Capacity - amp hr (CCA)	255 (750)	255 (750)
Starter Rolling Amps @ 0°C - 12V DC (24V DC)	920 (600)	920 (600)
24 Volt Battery Cable Size Up to 10ft (3m)	2/0	2/0
Air		
Air Consumption - cfm/ (m^3/m)	692 (19.6)	600 (17.0)
Approximate Heat Radiated to Air - BTU/min	856	759
Generator Cooling Air Flow 1&3Ø - cfm	1020	850
Exhaust Gas Volume - cfm (m^3/m)	1713 (49)	1409 (40)
Exhaust Gas Temp. - F° (C°)	919° (493°)	847° (453°)
Max. Exhaust Back Pressure - in H^2O (mm H^2O)	30 (762)	30 (762)
Wet Exhaust Elbow OD - in (mm)	6 (152)	6 (152)
Dry Exhaust Elbow - in (mm)	4 (102)	4 (102)
Fuel		
Fuel Injection Pump type and Control	Electronic (HPCR)	Electronic (HPCR)
Min. Suction - in (mm)	3/8 (10)	3/8 (10)
Min. Return Line - in (mm)	1/4 (6.44)	1/4 (6.4)
Max. Fuel Transfer Pump Suction Lift - in (m)	80 (2)	80 (2)
Max. Fuel Flow to Transfer Pump RPM - gph (lph)	63.4 (240)	63.4 (240)
Specific Fuel Consumption Max. Load RPM - lbs. hp. hr	0.373	0.373
Approx. Fuel Rate at RPM Fuel Load - gph (lph)	15.5 (31.4)	15.5 (31.4)
Max Engine Operating Angle		
Continuous (with Separate Expansion Tank)	20°	20°
Intermittent (2 Minutes)	30°	30°
Dimensions and Weight - Low Profile; Do not use for installation. Contact Factory for installation drawings and info.		
Length - in (mm)	100 (2540)	100 (2540)
Width - in (mm)	42 (1067)	42 (1067)
Height - in (mm)	40.5 (1030)	40.5 (1030)
Weight - lbs (kg)	4467 (2026)	6390 (2898)
Dimensions and Weight - Optional Enclosure; Do not use for installation. Contact Factory for installation drawings and info.		
Length - in (mm)	101 (2565)	101 (2565)
Width - in (mm)	42 (1067)	42 (1067)
Height - in (mm)	43 (1092)	43 (1092)
Weight - lbs (kg)	5047 (2289)	6970 (3161)

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