



**M200A13**

**175 kW (50 Hz, 1500 rpm, 3ph)**

## SPECIFICATIONS AND DIMENSIONS

### AC Output

<b>50 Hz, 1500 RPM* kW</b>	<b>175 kW</b>
Voltage regulation	0.5%
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)	95°C
Inline cylinders/operating cycle**	I-6 / 4
Aspiration	Turbo & Aftercooled
Displacement - cid (liter)	549 (9.0)
Bore/stroke - inches (mm)	4.65/5.35 (118/136)
Fuel injection pump type and control	(HPCR) Electronic
Oil fill capacity - gal (ltr)	8.7 (31)

### Cooling System (Heat exchanged standard, Keel cooled optional)

Heat rejection to jacket water -BTU min	12,522
Standard cooling type	Heat Exchanged
Optional cooling type	Keel Cooled
Freshwater pump capacity - gpm (lpm)	70.8 (268)
Heat exchanger approx coolant capacity - gal (ltr)	11.1 (42)
HE seawater pump capacity - gpm (lpm)	79 (299)
HE max seawater pump suction head lift - ft (m)	9 (2.8)
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)

### Genset/EATS and Enclosure Dimensions and Weight

Length - in (mm)	124 (3137)
Width - in (mm)	42 (1067)
Height - in (mm)	82 (2091)
Weight - lbs (kg)	6970 (3161)

### DC Electrical

DC starting voltage - standard	24
Min battery capacity - amp hr (CCA)	255 (750)
Battery cable size up to 10 ft (3m)	2/0

### Air (Based on standard three phase)

Air consumption - cfm (m <sup>3</sup> /m)	600 (17)
Approx heat radiated to air - BTU/min (kW)	2150 (37.8)
Generator cooling air flow cfm (m <sup>3</sup> /m)	850 (24)
Exhaust gas volume - cfm (m <sup>3</sup> /m)	1409 (40)
Exhaust gas temp - F° (C°)	847 (453)
Max. exhaust back Pressure - inch H <sub>2</sub> O (mm H <sub>2</sub> O)*	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
Supplied and return Size	3/8 in NPT
Max fuel transfer pump suction lift - in (mm)	80 (2032)
Max fuel flow to transfer pump - gph (lph)	63.4 (240)
Specific fuel consumption max load - lbs/hp-hr (g/kW-hr)	0.383 (232)
Approx. full load fuel consumption - gph (lph)	14 (53)

### Max Engine Operating Angle

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

### Dimensions and Weight

Length - in (mm)	124 (3137)
Width - in (mm)	42 (1067)
Height - in (mm)	82 (2091)
Weight - lbs (kg)	6390 (2898)

\* For units with exhaust after treatment, max back pressure can be 60 in H<sub>2</sub>O (1524 mm H<sub>2</sub>O) with diminished performance. (50 Hz units only)

## FEATURES AND BENEFITS

**ENGINE BLOCK** - 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. Gear driven coolant 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 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. 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: Gear driven with 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 a jacket-water flow for even temperature control.

**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-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, 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 95°/50° heat rise ratings. Engines and generators are torsionally matched for long life. Automatic voltage regulator; ±1/2% regulation over the entire range from no load to full load. Configured for isochronous frequency control with ECU electronic governor control.