



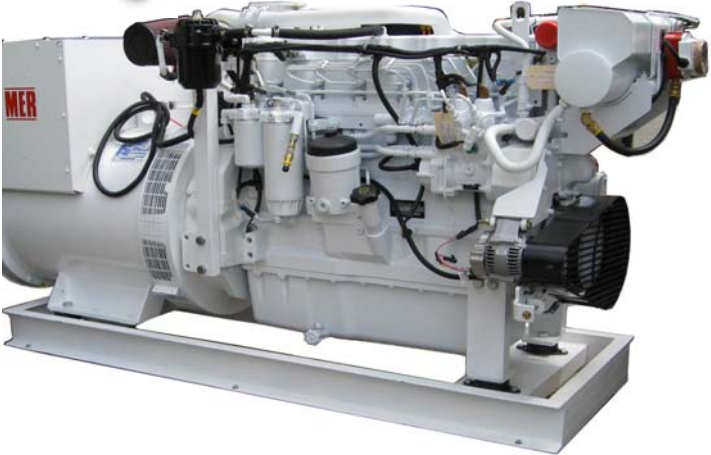
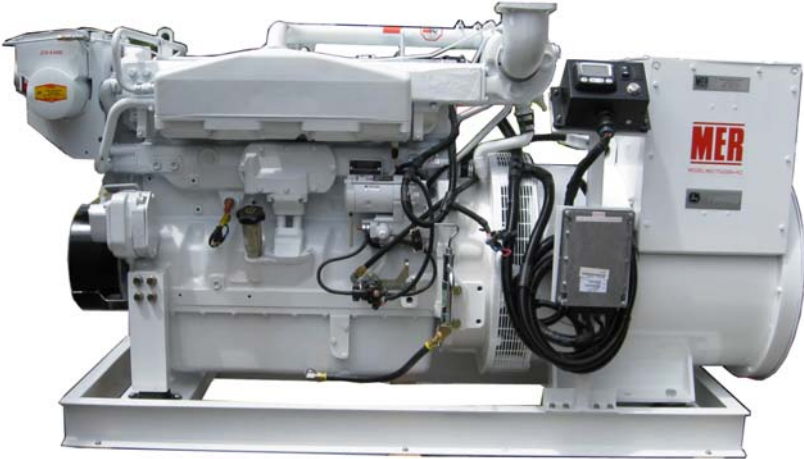
MARINE DIESEL GENERATOR

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6081T/6206

Tier II Emission Compliant

****2 Year Limited
commercial warranty**



SOUND ENCLOSURES AVAILABLE FOR ALL MER GENERATORS

ENGINE FEATURES:

- * Tier II compliant electronically controlled high pressure common rail fuel injection for fuel efficient, low smoke operation.
- * Wet Cylinder liners for long life and easy rebuildability.
- * Six cylinder, four stroke, counterbalanced, Turbocharged direct injected design, for smooth, quiet performance.
- * Deluxe John Deere Digital instrument panel, pre-wired for easy plug-together installation.
- * Automatic shut down system for high water temperature and/or low oil pressure.
- * Electric start/stop solenoid with warm up idle function.
- * Electronic fuel injection governing for precise 60 Hz generator output no load to full load.
- * Structural steel base frame with anti-vibration suspension mounts at crankcenter to minimize vibration transfer to the hull.
- * Live PTO with 50 hp output, standard on Keel Cooled Engines.

Package Length:
 85.05" (431 Frame)
 88.56" (432 or UCIDI274H Frame)
Package Weight: 3,365 lbs



Width:-----36.5"
Height:-----41.4"
Length: Engine:-----51.16"
Generator Length:
 Lima MG175SL 33.89" (SL, 431 frame)
 Newage MG175SN 37.05" (UCDI- 274H)
Package Weight: 3,365 lbs

Dimensions subject to change.
All dimensions in inches.

MG-175JD-SL-Tier II
175 Kilowatt - Continuous rating 1800 RPM
3,365 Pounds*
Externally Regulated
Marine Generator

MER Equipment
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Marine Engine & Repair
 338 West Nickerson
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 (206) 286-1817 FAX: (206) 286-1917
Toll Free: 1-800-777-0714
E-mail info@merequipment.com

MER MG-175JD-TII

1800 RPM MARINE GENERATOR

OUTPUT @ 1800 RPM:

Prime Power 3 Phase rating @ .8 PF.....175Kw

Standby rating @ 125deg. rise.....191Kw

Voltage regulation: MG-175SL (SER).....±1%

Note: SER Basler regulated units are built for multi-purpose onboard power. MAC motor application units are built for large electric motor starting, at a 1hp per 1Kw capacity (code G, motor-35% dip, one

INSTALLATION SPECIFICATIONS:

Minimum Dry Exhaust output size: 5" ID

Opt. wet exhaust elbow: 6" OD (Hose ID 6")

Fuel inlet/return size: 12mm/ 1/2" OD (Hose ID 1/2")

Total Fuel Flow with return: 86gph.

Exhaust gas flow @ 1800 rpm: 1314, CFM, Max. Temp. 817 F.

Engine heat rejection: 9619 BTU, Coolant Flow 57gpm

MER marine gensets come standard set up for keel cooling. Heat exchanger cooling is available with brass gear-driven sea water pump, and cupro-nickle heat exchanger & stainless wet exhaust elbow.

ENGINE SPECIFICATIONS:

ENGINE MODEL: John Deere 6081TFM76

ENGINE TYPE.....6 CYLINDER, 4 CYCLE, TURBOCHARGED
FRESH WATER AFTERCOOLED, COUNTER-BALANCED,
WATER COOLED, MARINE DIESEL

PISTON DISPLACEMENT.....497cu.in. (8.1L)

CYLINDER LINER.....CAST IRON, WET, O-RING FIT

CRANKSHAFT.....Forged steel, dynamically balanced

COMPRESSION RATIO.....15.7:1

WATER CAPACITY.....38quarts, 30L

ENGINE ROTATION.....CCW (facing flywheel)

RECOMMENDED BATTERY800 CCA, 12V

* replaceable Cast Iron Wet liners for long life expectancy & easy in frame rebuildability.

* low vibration & noise due to counterbalanced crankshaft, high mass flywheel & crank-center mounted vibration isolators.

* fuel efficient, low smoke performance, thanks to electronically controlled high pressure fuel common rail fuel injection system.

* wet exhaust manifold, water cooled turbo and expansion tank provide low engine room temperatures and reduced fire hazard.

* easy starting in all weather conditions, with direct injection, cold start pre-heating and pre-installed engine block heater.

* automatic shut-down system triggered by low oil pressure or high water temperature conditions, for engine protection and safety.

OPTIONS:

Electronic generator meters & controls, heat exchanger cooling, multiple clutched or live PTOs, Motor application generator ends, remote or automatic start.

Many other optional features & designs are available, please inquire, if you have special application problems.

MER Marine Generators

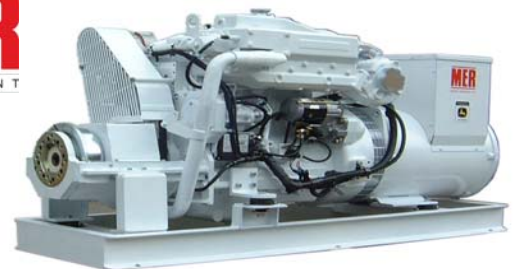
"More power through better performance."

The MER Marine Generator combines a direct driven, 1800 RPM, brushless, continuous duty alternator and MER Packaged John Deere Diesel engine in a generator system manufactured & load tested to the strictest quality standards.

The MER Generator is designed and built specifically for the rugged conditions of commercial use. The expected time between overhauls on the MER packaged generator set is 30 to 50 thousand hours.

Around the world, the MER name has become synonymous with dependable, fuel efficient, maintenance free diesel power. MER has been building generator sets for the fishermen, contractors, and processors of the west coast since 1964. Our generators are built to withstand the tests of time and heavy use.

Talk to an owner of our products. Ask him about our gensets and our after sales services and then call us. We are toll free from anywhere in North America and we're on call 24 hours a day for same day shipping, worldwide.



A DIVISION OF MARINE ENGINE & REPAIR

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www.merequipment.com





JOHN DEERE

ENGINE PERFORMANCE CURVE

Rating: Marine
 Application: Generator
 Prime Power

POWERTECH 8.1 L Engine
 Model: **6081AFM75**

261 hp (195 kW) @ 1800 rpm
217 hp (162 kW) @ 1500 rpm

Speed rpm (Hz)	Generator Efficiency %	Keel Cooled		Power Factor	Calculated Gen-Set Rating	
		(no fan)			kW	kVA
1500 (50)	88-92	--	--	0.8	142-149	178-186
1800 (60)	88-92	--	--	0.8	171-179	214-224

Air Intake Restriction 12 in.H₂O (3 kPa)
 Exhaust Back Pressure 30 in.H₂O (7.5 kPa)

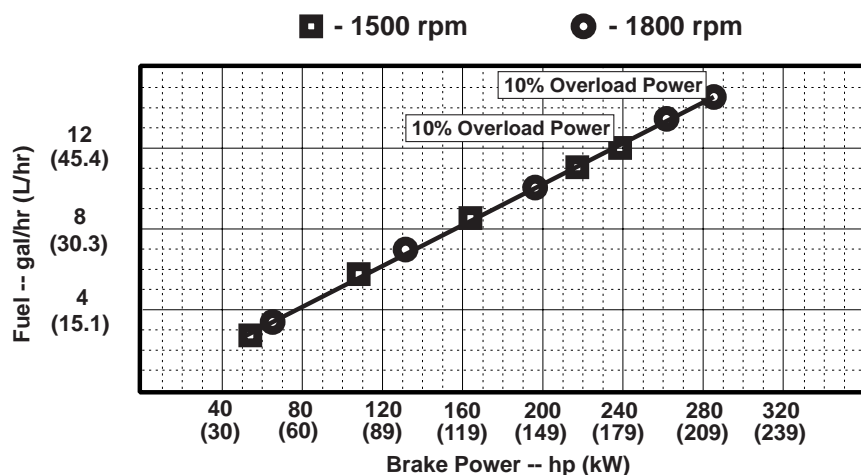
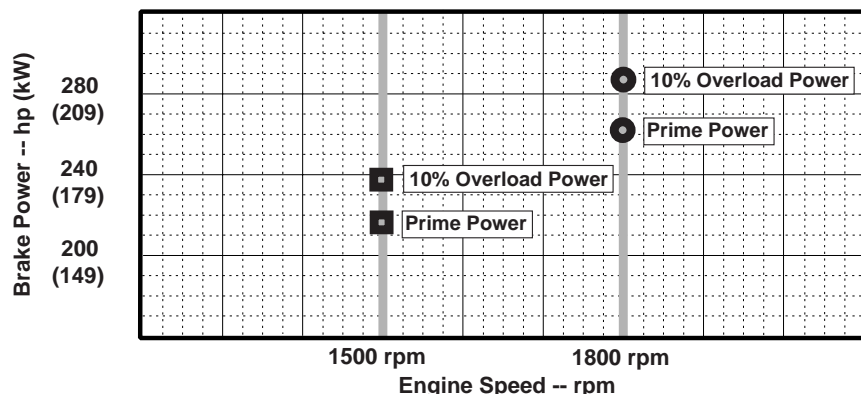
Gross power guaranteed within + or - 5% at SAE J1995 and ISO 8665 conditions:

- 77 °F (25 °C) air inlet temperature
- 29.31 in.Hg (99 kPa) barometer
- 104 °F (40 °C) fuel inlet temperature
- 0.853 fuel specific gravity @ 60 °F (15.5 °C)

Conversion factors:

- Power: kW = hp x 0.746
- Fuel: 1 gal = 7.1 lb, 1 L = 0.85 kg
- Torque: N•m = lb-ft x 1.356

All values are from currently available data and are subject to change without notice.



Notes:

1800 RPM Emission Certifications:	1500 RPM Emission Certifications:
<ul style="list-style-type: none"> • EPA Commercial Marine (40 CFR Part 94) • IMO Annex VI 	<ul style="list-style-type: none"> • IMO Annex VI
Ref: Engine Emission Label	Ref: Engine Emission Label

Certified by:

NEAL CLEPER 6 MAY 2004

* Revised Data
 Curve 6081AFM75261MG Sheet 1 of 2
 May 2004

Engine Specification Data

General Data

Model 6081AFM75
 Number of Cylinders 6
 Bore and Stroke--in. (mm)..... 4.6 x 5.1 (116 x 129)
 Displacement--in.³ (L)497 (8.1)
 Compression Ratio 15.7 : 1
 Valves per Cylinder--Intake/Exhaust..... 1 / 1
 Firing Order..... 1-5-3-6-2-4
 Combustion System..... Direct Injection
 Engine Type In-line, 4-Cycle
 Aspiration Turbocharged & Aftercooled
 Aftercooler..... Engine Coolant
 Engine Crankcase Vent System Open
 Max. Crankcase Pressure--in. H₂O (kPa).....2 (0.5)

Physical Data

Length--in. (mm)51.1 (1299)
 Width--in. (mm)31.0 (787)
 Height, Crank Center to Top--in. (mm)27.0 (687)
 Height, Crank Center to Bottom--in. (mm) 12.5 (318)
 Weight, dry--lb (kg).....1881 (853)
 (Includes flywheel housing, flywheel & electrics)
 Center of Gravity Location From
 Rear Face of Block (X-axis)--in. (mm)21.5 (546)
 Right of Crankshaft (Y-axis)--in. (mm) -3.5 (-87.9)
 Above Crankshaft (Z-axis)--in. (mm)7.0 (179)
 Max. Allow. Static Bending Moment at Rear Face
 of Flywhl Hsg w/ 5-G Load--lb-ft (N*m)600 (814)
 Thrust Brng. Load Limit (Forward)--lb (N) ..1950 (8673)
 Maximum Installation Angle
 Front up--degrees 12
 Front down--degrees.....0

Air System

1800 rpm 1500 rpm

Min. Ventilation Area--in.² (m²)149(0.096) .. 110(0.071)
 Maximum Allowable Air Temperature Rise,
 Ambient to Engine Inlet--°F (°C)30 (17)30 (17)
 Engine Air Flow--ft³/min (m³/min) ...554 (15.7) ... 410 (11.6)
 Maximum Air Intake Restriction
 Dirty Air Cleaner--in. H₂O (kPa)25 (6.25) 25 (6.25)
 Clean Air Cleaner--in. H₂O (kPa).....12 (3.0) 12 (3.0)
 Intake Manifold Pressure--psi (kPa)....23 (159)18 (121)

Cooling System

1800 rpm 1500 rpm

Eng. Heat Reject--BTU/min (kW)....9619(169) .. 9392(165)
 Eng. Radiated Heat--BTU/min (kW)1446(25.4) . 1201(21.1)
 Coolant Flow--gal/min (L/min).....57 (216) 48 (180)
 Min. Coolant Fill Rate--gal/min (L/min)3.2 (12)
 Thermostat Start to Open--°F (°C) 160 (71)
 Thermostat Fully Open--°F (°C).....183 (84)
 Maximum Top Tank Temp--°F (°C)212 (100)
 Minimum Sea Water-to-Boil--°F (°C)90 (32)
 Min. Water Pump In. Restrict.--in. H₂O (kPa) 00 (00)
 Rec'd. Pressure Cap--psi (kPa)15 (100)
 Max. Pressure Drop
 Across Keel Cooler--psi (kPa).....4 (30) 3 (20)
 Engine Coolant Capacity--qt (L) 26* (25*) 26* (25*)

Electrical System

12 Volts 24 Volts

Recommended Battery Capacity
 CCA @ 32 °F (0 °C)--amp 800 570
 Max. Starting Circuit Resist.--Ohm 0.0012 0.002
 Starter Rolling Current
 @ 32 °F (0 °C)--amp 950 600

Exhaust System

1800 rpm 1500 rpm

Exhaust Gas Flow--ft³/min (m³/min)1314 (37.2).. 1035 (29)
 Exhaust Temperature--°F (°C)817 (436) .. 896 (480)
 Min. Exhaust Pipe Dia. Dry--in. (mm) 4.5 (115) 4.0 (100)
 Min. Exhaust Pipe Dia. Wet--in. (mm)5.0 (125) 4.5 (115)
 Max. Allow. Back Press.--in. H₂O (kPa).....30 (7.5)
 Max. Weight on Turbo--lb (kg)55 (25.0)

Fuel System

1800 rpm 1500 rpm

Fuel Injection Pump--Denso HPCR
 Governor Type Electronic
 Governor Regulation..... Isochronous or Droop
 Total Fuel Flow--lb/hr (kg/hr).....608 (276) 507 (230)
 Total Fuel Flow--gal/hr (L/hr).....86 (325) 71 (271)
 Min. Rec'd. Fuel Line ID--in. (mm) 0.38 (10.0) 0.35 (9.0)
 Min. Rec'd. Fuel Line Size -7 -6
 Fuel Cons. 'Prime' --lb/hr (kg/hr)....94.3 (42.8) .. 78.1 (35.4)
 Fuel Cons. 'Prime' --gal/hr (L/hr) ...13.3 (50.3) .. 11.0 (41.7)
 Max Leak-off Line Press.--psi (kPa)9 (60)
 Max. Fuel Trans. Pump Suction--ft (m) 10 (3.0)
 Max. Fuel Inlet Restrict.--in. H₂O (kPa) . -120 (-30.0)
 Max. Fuel Ht. Above Inj.Pump--ft (m) 10 (3.0)
 Max Leak-off Return Height--ft (m)8 (2.5)
 Max. Fuel Inlet Temp. (w/o derate)--°F (°C) .149 (65)
 Fuel Filter @ 98% Efficiency--Microns..... 2

Lubrication System

1800 rpm 1500 rpm

Oil Press. at Rated Speed--psi (kPa)..44 (305) 41 (280)
 Oil Pressure at Low Idle--psi (kPa)36 (250) 36 (250)

Sea Water System

1800 rpm 1500 rpm

Seawater Pump Flow--gal/min (L/min)43 (163) 36 (136)
 Max. Inlet Restriction--in. H₂O (kPa) ..120 (30) 120 (30)
 Max. Outlet Press--psi (kPa).....20 (140) 20 (140)
 Max. Suction Lift--ft (m)10 (3.0) 10 (3.0)

Performance Data

1800 rpm 1500 rpm

Performance Option Codes 722C/722D. 721C/721D
 Rated 'Prime' Power--hp (kW)261 (195) 217 (162)
 10% Overload Eng. Power--hp (kW)287 (214) 239 (178)
 Low Idle Speed--rpm 1100 1100
 Rated Torque--ft-lb (N*m).....761 (1032) .. 760 (1030)
 BMEP--psi (kPa)231 (1594) .. 231 (1594)
 Friction Power @ Rated Spd.--hp (kW)28 (21) 21 (16)
 Smoke @ Rated Speed--Bosch No.<1.1 <1.1

Fuel Consumption

1800 rpm 1500 rpm

Prime:
 25 % Power-- gal/hr (L/hr)3.3 (12.5) 2.7 (10.3)
 50 % Power-- gal/hr (L/hr) 7.0 (26.3) 5.8 (22.1)
 75 % Power-- gal/hr (L/hr) ... 10.2 (38.7) 8.4 (31.8)
 100 % Power-- gal/hr (L/hr) ... 13.3 (50.3) .. 11.0 (41.7)
 10% Overload Power-- gal/hr (L/hr)14.5 (54.8) . 12.0 (45.5)

Data based on keel-cooled engine.
 All values at rated speed and power with standard options unless otherwise noted.

* Revised Data
 Curve 6081AFM75261MG Sheet 2 of 2
 May 2004