# PowerTech ™ 6090AFM75 Diesel Engine

Marine Generator Drive Engine Specifications



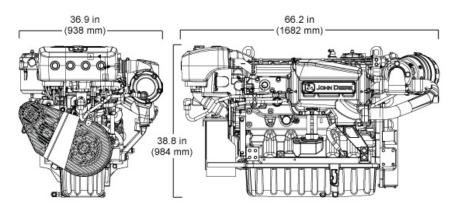


6090AFM75 shown

### **Emissions**

EPA Commercial Marine Tier 2
IMO MARPOL Annex VI Compliant

### **Dimensions**



Dimensions shown in mm (in) may vary according to options selected. Contact your distributor for more information.

# General Data (Based on Standard Option Configuration)

Model	6090AFM75
Number of cylinders	6
Displacement - L (cu in)	9.0 (549)
Bore and Stroke mm (in)	118 x 136 (4.65 x 5.35)
Engine Type	In-line, 4-Cycle
Aspiration	Turbocharged and air-to-coolant aftercooled

## Classification Societies

ABS, BV, CCS, DNV-GL, LR

# Length maximum - mm (in)1712 (67.4)Length to rear face of flywheel housing - mm (in)1415 (55.7)Height - mm (in)984 (38.8)Height, crankshaft centerline to top - mm (in)665 (26.2)Height, crankshaft centerline to bottom - mm (in)319 (12.6)Weight, dry - kg (lb)1011 (2229)

### **Features and Benefits**

# High Pressure Common Rail Fuel System

- Higher (33%) injection pressures, up to 1600 bar (23,000 psi)
- Variable injection pressure and timing control

## Electronic Engine Control Unit (ECU)

 Advanced fault code diagnostics and customizable engine protections ensure reliability and uptime. Provides highly customizable features and trim to integrate your vessel.

### Watercooled Turbocharger and Exhaust Manifold

- Cooler and quieter environment for vessel and crew
- Reduced external connections eliminates hoses and fittings that can leak or break

# Replaceable Cylinder Liners

 Replaceable wet-type cylinder liners are precision-machined and har dened for long life. Allows engine to be rebuilt to original specifications.

### Heat Exchanger

 High-capacity heat exchanger provides reliable operation in adverse conditions.

### High Power Density

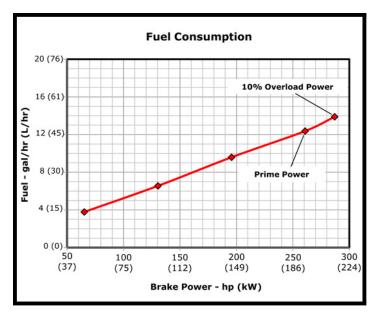
- High power density offers more power in a smaller package

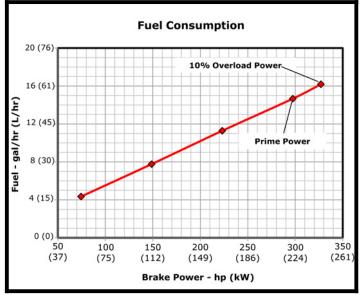
<sup>\*</sup>SOLAS and other accessories available. Contact your distributor for details.

# **Performance Curves**

50Hz (1500 rpm)

## 60Hz (1800 rpm)





Performance data points shown at 25%, 50%, 75%, 100% (prime), and 110% (overload) power.

Calculated Generator-Set Rating								
Rated speed Hz (rpm)	Generator efficiency %	Engine power		Power factor	Calculated generator set rating			
		Prime*			Prime*			
		kW	hp		kWe	kVA		
50 (1500)	88-92	195	262	0.8	172-179	215-224		
60 (1800)	88-92	222	298	0.8	195-204	244-255		

<sup>\*</sup>Prime power is the normal power an engine is capable of delivering with a variable load for an unlimited number of hours per year. This rating conforms to ISO 3046 and SAE J1995. This rating incorporates a 10 percent overload capability, and conforms to ISO 8528 prime power.

See your John Deere Power Systems engine distributor or marine dealer for more detailed performance information.