

# PowerTech

## 6068AFM Engine Diesel Engine

Marine Generator Drive Engine Specifications

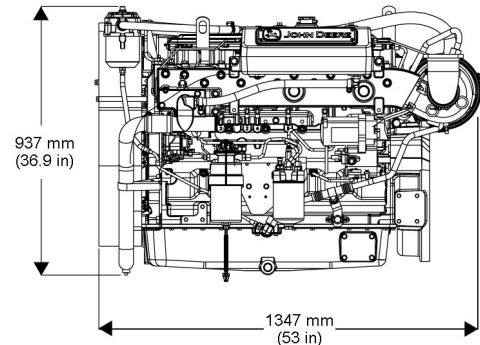
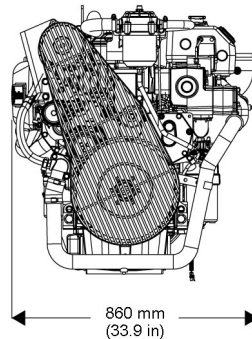


JOHN DEERE

### Dimensions



6068AFM Engine shown



### Certifications

American Bureau of Shipping  
Bureau Veritas  
Det Norske Veritas  
EU 2002/88/EC  
IMO MARPOL Annex VI  
Lloyd's Register  
US EPA Marine Tier 2 Compliant

### General data

Model	6068AFM75	Length - mm (in)	1347 (53.0)
Number of cylinders	6	Width - mm (in)	860 (33.9)
Displacement - L (cu in)	6.8 (415)	Height, Centerline to Top-- mm. (in)	645 (25.4)
Bore and Stroke-- mm (in)	106.5 x 127 (4.19 x 5.00)	Height, Centerline to Bottom-- mm. (in)	292 (11.5)
Compression Ratio	16.7 : 1	Weight, dry-- kg (lb)	812 (1790)
Engine Type	In-line, 4-Cycle	Maximum Installed Angle	Front Up – degrees 0 Front Down – degrees 0
Aspiration	Turbocharged and air-to-coolant aftercooled		

### 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

#### John Deere Electronic Control Systems

- Built in controls eliminates the need for costly add on engine warning systems and associated components
- Service diagnostics and error codes automatically stored for later retrieval & ease of diagnostics
- Built in engine synchronization feature

#### Centered, Vertical Injectors

- Engines burn cleaner, resulting in lower emission and improved fuel economy with the aid of vertical injectors

#### 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 Wet-type Cylinder Liners

- Hardened and precision machined for long life
- Rebuild to original specifications

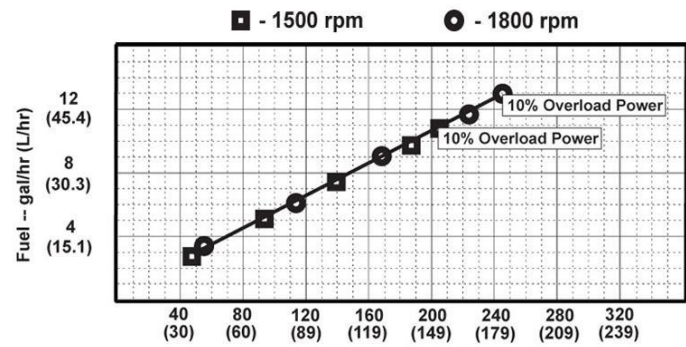
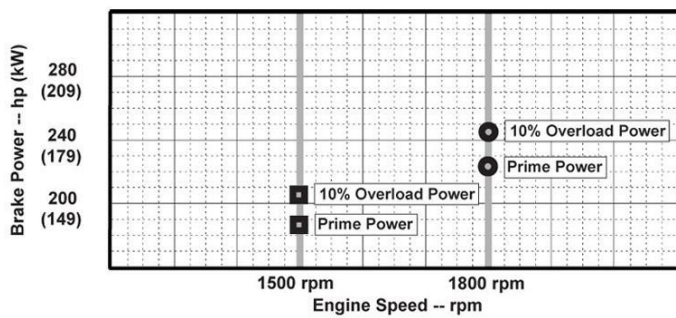
#### High Torque and Low Rated RPM

- Enables the engine to turn larger propellers at lower speed for best efficiency
- Excellent vessel control and maneuvering
- Lower rated rpm limits vibration and noise for better crew comfort

#### Heat Exchanger or Keel Cooled

- High-capacity heat exchanger designed for reliable operation in adverse conditions
- Keel cooled option provides application flexibility

## Performance curve



System data	1800 rpm	1500 rpm
<b>Air system</b>		
Engine air flow - m <sup>3</sup> /min (ft <sup>3</sup> /min)	15.4 (543.8)	10.4 (367.3)
<b>Exhaust system</b>		
Dry - mm (in)	101.6 (4.0)	101.6 (4.0)
Wet - mm (in)	152.4 (6.0)	152.4 (6.0)
<b>Cooling system</b>		
Coolant flow - L/min (gal/min)	201 (53.1)	167 (44.1)
<b>Sea water system</b>		
Pump flow - L/min (gal/min)	151 (39.9)	126 (33.3)
<b>Fuel system</b>		
Governor type	electronic	electronic
Governor regulation - %	Isochronous or Droop	Isochronous or Droop
Total fuel flow - L/hr (gal/hr)	152 (40.2)	142 (37.5)

Performance data	1800 rpm	1500 rpm
10% overload engine Power - kW (hp)	183 (245.4)	153 (205.2)
Prime engine power - kW (hp)	166 (222.6)	139 (186.4)
Low idle speed - rpm	1150	1150
BMEP - kPa (psi)	NA	NA

## Performance data

Hz (rpm)	Generator efficiency %	Keel cooled		Power factor	Calculated gen-set rating	
		(no fan)			kW	kVA
50 (1500)	88-92	--	--	0.8	122-128	153-160
60 (1800)	88-92	--	--	0.8	146-153	183-191

**John Deere Power Systems**  
 3801 W. Ridgeway Ave.  
 PO Box 5100  
 Waterloo, IA 50704-5100  
 Phone: 1-800-533-6446  
 Fax: 319.292.5075

**John Deere Power Systems**  
**Usine de Saran**  
 La Foulonnerie - B.P. 11.13  
 45401 Fleury les Aubrais Cedex  
 France  
 Phone: 33.2.38.82.61.19  
 Fax: 33.2.38.82.60.00

*Preliminary Information*  
 All values at rated speed and power with standard options unless otherwise noted.  
 Specifications and design subject to change without notice.