

# PowerTech™

## 6068SFM85 Diesel Engine

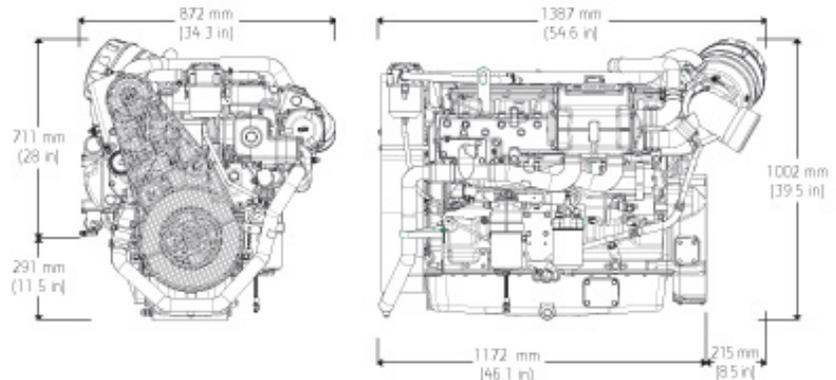
Marine Generator Drive Engine Specifications



### Dimensions



6068SFM85 shown



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

### Emissions

EPA Commercial Marine Tier 3 @ 1800 rpm / 60Hz

IMO MARPOL Annex VI Tier II Compliant

### General Data (Based on Standard Option Configuration)

Model	6068SFM85	Length maximum - mm (in)	1387 (54.6)
Number of cylinders	6	Length to rear face of flywheel housing - mm (in)	1172 (46.1)
Displacement - L (cu in)	6.8 (415)	Flywheel housing SAE	3
Bore and Stroke-- mm (in)	106 x 127 (4.17 x 5.00)	Height - mm (in)	1002 (39.5)
Engine Type	In-line, 4-Cycle	Height, crankshaft centerline to top - mm (in)	711 (28.0)
Aspiration	Air-to-sea water	Height, crankshaft centerline to bottom - mm (in)	291 (11.5)
		Weight, dry - kg (lb)	763 (1682)

### Classification Societies

ABS,BV,CCS,CRS,DNV-GL,LR

\*SOLAS and other accessories available. Contact your distributor for details.

### Features and Benefits

#### Optional Low RPM Operation

- A lower speed option provides the user the ability to start the engine without going to the gen-set rated speed and allows the user to clutch in an accessory that may be driven by the engine

#### 4-Valve Cylinder Head

- Excellent airflow through 4-valve cylinder head delivers greater low-speed torque and better transient response time

#### High-pressure Common-rail (HPCR)

- The HPCR fuel system provides variable common-rail pressure, multiple injections, and higher injection pressures.
- Controls fuel injection timing and provides precise control for the start, duration, and end of injection
- Transfer pump with priming option
- Provides high performance, excellent fuel economy, and low emissions

#### Replaceable Cylinder Liners

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

#### 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

#### Heat Exchanger

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

#### Multiple Service Options

- Either-side oil fill/dipstick combinations and remote oil and fuel filter options are available for easier service access

## Features and Benefits

### Water-cooled Exhaust Manifold

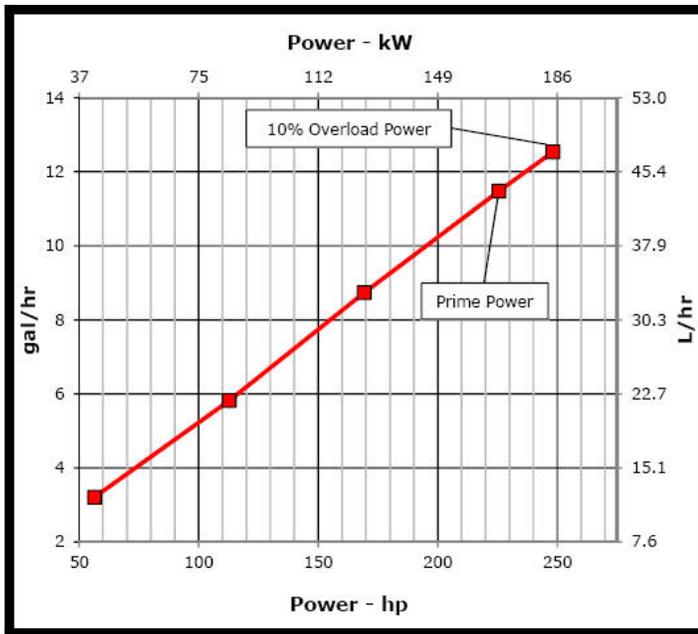
- Integrated components eliminate external hoses and fittings
- Wet exhaust manifold creates a cooler and quieter environment for passengers and crew

### Turbocharged with Air-to-Seawater Aftercooling

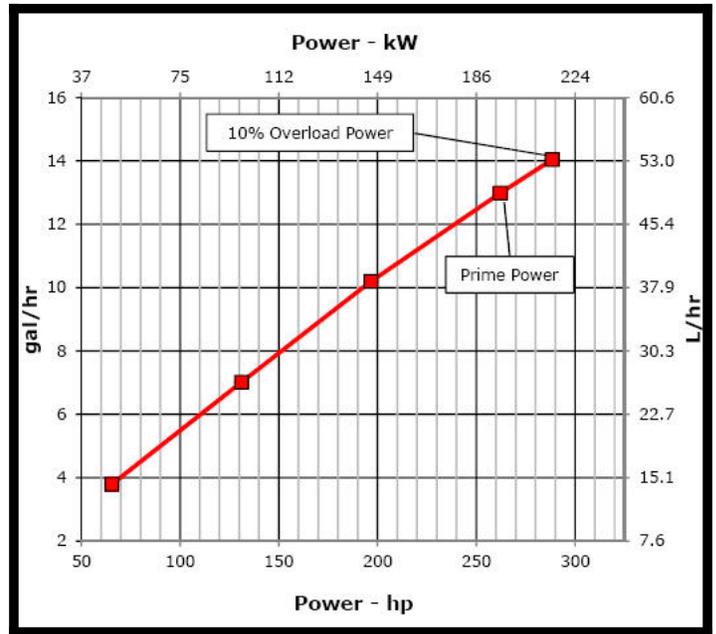
- Cooler turbocharger operation enables higher ratings and efficiencies for applications that require high power or speed

## 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	168	225	0.8	148-155	185-194
60 (1800)	88-92	195	262	0.8	172-179	215-224

\*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.

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*Preliminary Information*

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