# PowerTech ™ 6068SFM85 Diesel Engine

Marine Generator Drive Engine Specifications



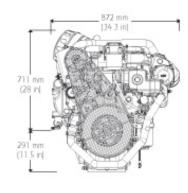


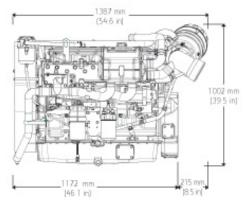
6068SFM85 shown

#### **Emissions**

EPA Commercial Marine Tier 3
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	6068SFM85
Number of cylinders	6
Displacement - L (cu in)	6.8 (415)
Bore and Stroke mm (in)	106 x 127 (4.17 x 5.00)
Engine Type	In-line, 4-Cycle
Aspiration	Air-to-sea water

#### Classification Societies

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

# Length maximum - mm (in) 1387 (54.6) Length to rear face of flywheel housing - mm (in) 1172 (46.1) Flywheel housing SAE 3 Height - mm (in) 1002 (39.5) Height, crankshaft centerline to top - mm (in) 711 (28.0) Height, crankshaft centerline to bottom - mm (in) 291 (11.5) Weight, dry - kg (lb) 763 (1682)

#### **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

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

#### Features and Benefits

# Water-cooled Exhaust Manifold

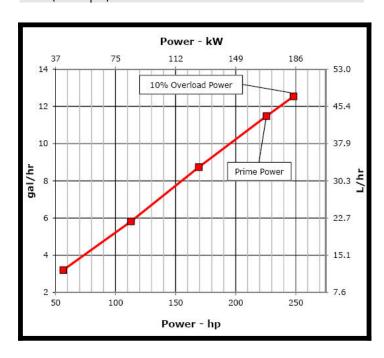
- Integrated components eliminate external hoses and fittings
- Wet exhaust manifold creates a cooler and quieter environment for passengers and crew

# Turbocharged with Air-to-Seawater Aftercooling

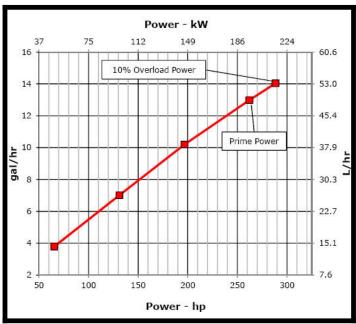
 Cooler turbocharger operation enables higher ratings and efficiencies for applications that require high power or speed

#### 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  Prime*		Power factor	Calculated generator set rating			
					Prin	ne*		
		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		

<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.

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Phone: 33.2.38.82.61.19 Fax: 33.2.38.82.60.00 All values at rated speed and power with standard options unless otherwise noted. Specifications and design subject to change without notice.