

PowerTech™

6068AFM75 Diesel Engine

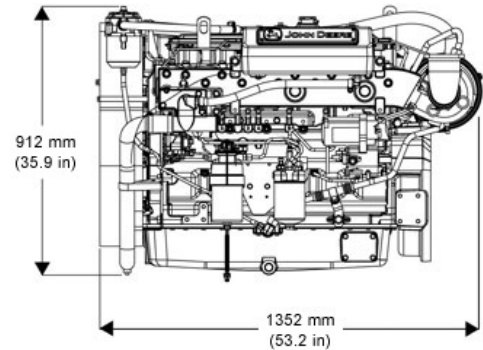
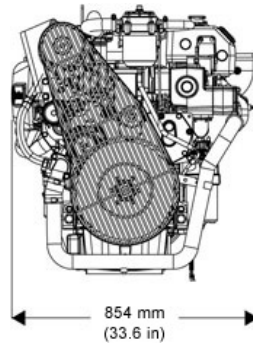
Marine Generator Drive Engine Specifications



Dimensions



6068AFM75 shown



Certifications

EPA Commercial Marine Tier 2
IMO MARPOL Annex VI Compliant

General data

Model	6068AFM75	Length - mm (in)	1352 (53.2)
Number of cylinders	6	Width - mm (in)	854 (33.6)
Displacement - L (cu in)	6.8 (415)	Height, Centerline to Top-- mm. (in)	646 (25.4)
Bore and Stroke-- mm (in)	107 x 127 (4.21 x 5.00)	Height, Centerline to Bottom-- mm. (in)	266 (10.5)
Compression Ratio	16.7 : 1	Weight, dry-- kg (lb)	812 (1790)
Engine Type	In-line, 4-Cycle	Maximum Installed Angle	Front Up – degrees 12 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

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

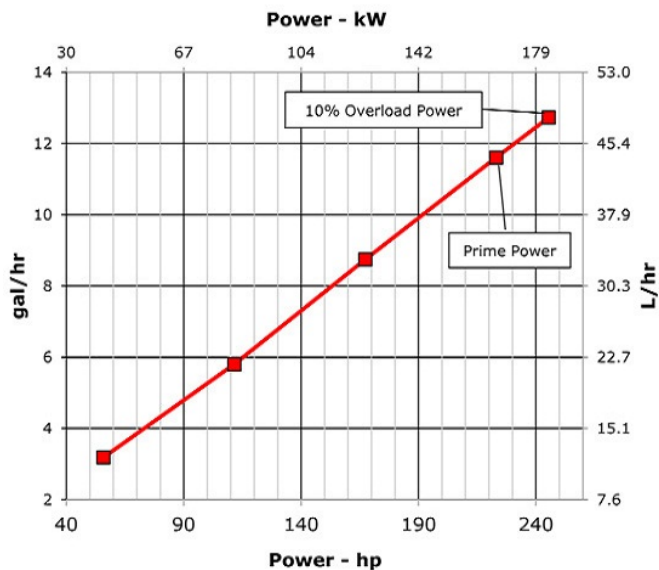
Replaceable Wet-type Cylinder Liners

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

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
Air system		
Air system		
Engine air flow - m ³ /min (ft ³ /min)	15.4 (543.8)	10.5 (370.8)
Exhaust system		
Dry - mm (in)	101.6 (4.0)	101.6 (4.0)
Wet - mm (in)	127.0 (5.0)	127.0 (5.0)
Cooling system		
Coolant flow - L/min (gal/min)	240 (63.4)	189 (49.9)
Sea water system		
Pump flow - L/min (gal/min)		
Fuel system		
Governor type	electronic	electronic
Governor regulation - %		
Total fuel flow - L/hr (gal/hr)	162 (42.8)	162 (42.8)

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		
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	122-129	153-161
60 (1800)	88-92	--	--	0.8	146-153	183-191