PowerTech ™ 6068TFM50 Diesel Engine

Marine Generator Drive Engine Specifications



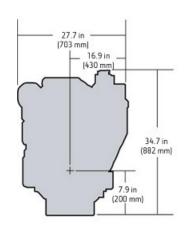


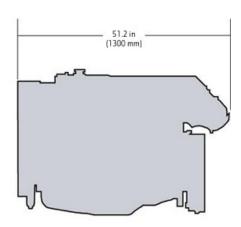
6068TFM50 shown

Certifications

none

Dimensions





General data

Model	6068TFM50
Number of cylinders	6
Displacement - L (cu in)	6.8 (415)
Bore and Stroke mm (in)	106 x 127 (4.17 x 5.00)
Compression Ratio	17.0:1
Engine Type	In-line, 4- Cycle
Aspiration	Turbocharged

Length - mm (in)	1300 (51.2)	
Width - mm (in)	703 (27.7)	
Height mm (in)	882 (34.7)	
Weight, dry kg (lb)	730 (1609)	
Maximum Installed Angle	Front Up – degrees	9
	Front Down – degrees	0

Features and benefits

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

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

Corrosion Resistant Components

- Provides engine protection from the effects of seawater

Either-side Service

- Oil fill and dipstick combinations
- Remote oil filter for easier service access
- Application and service flexibility to provide installation convenience plus fast and easy maintenance

Heat Exchanger or Keel Cooled

- High-capacity heat exchanger designed for reliable operation in adverse conditions
- Integrated expansion tank, heat exchanger and exhaust manifold reduce chances of leaks
- Keel cooler options provide application flexibility

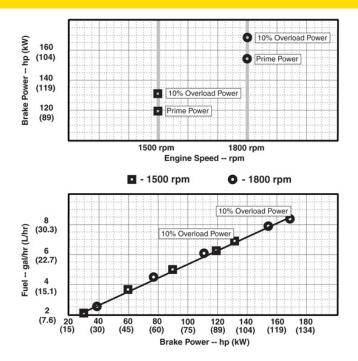
High Torque and Low Rated RPM

- 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

Fuel System

- Proven and reliable Mechanical Governor

Performance curve



System data	1800 rpm	1500 rpm
Air system		
Engine air flow - m 3 /min (ft 3 /min)	8 (282.5)	6 (211.9)
Exhaust system		
Dry - mm (in)	100 (3.9)	100 (3.9)
Wet - mm (in)	113 (4.4)	113 (4.4)
Cooling system		
Coolant flow - L/min (gal/min)	125 (33.0)	116 (30.6)
Sea water system		
Pump flow - L/min (gal/min)	83 (21.9)	68 (18.0)
Fuel system		
Governor type	Mechanical	Mechanical
Governor regulation - %	5%	5%
Total fuel flow - L/hr (gal/hr)	87 (23.0)	73 (19.3)

Performance data	1800 rpm	1500 rpm
10% overload engine Power - kW (hp)	125 (167.6)	98 (131.4)
Prime engine power - kW (hp)	115 (154.2)	89 (119.4)
Low idle speed - rpm	1100	1100
BMEP - kPa (psi)	1232 (179)	1154 (167)

Performance data							
Hz (rpm)	Generator efficiency %	Keel cooled		Power factor	Calculated g	en-set rating	
		(no	o fan)		kW	kVA	
50 (1500)	88-92			0.8	78-82	98-102	
60 (1800)	88-92			0.8	99-106	124-132	

Phone: 33.2.38.82.61.19 Fax: 33.2.38.82.60.00