

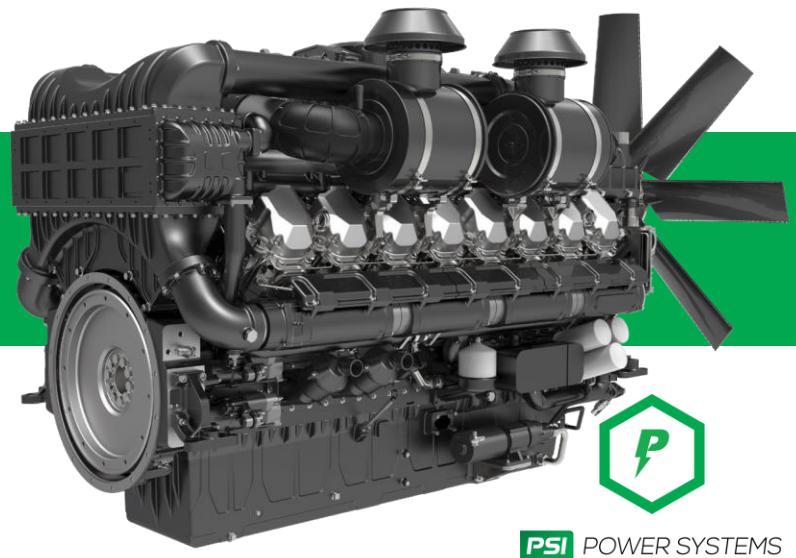
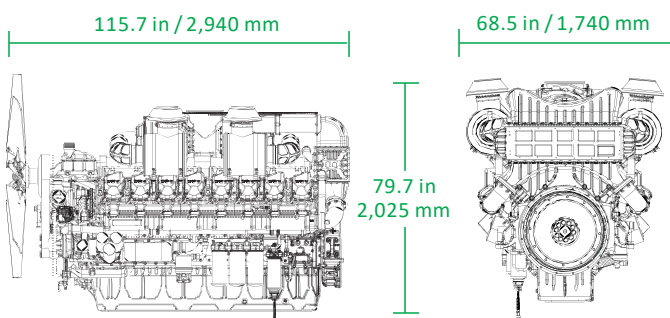
53L DIESEL ENGINE

The PSI 53-liter is a diesel engine developed from the block up to be a reliable and durable power unit. Built upon a proven marine-diesel cast iron block, the 16-cylinder V-Configuration, turbocharged inter-cooled engine features replaceable wet liners and water-cooled cooling system.

PSI designs, engineers, and manufactures a range of advanced, emission-certified engines and power systems that run on a wide variety of fuels, including natural gas, propane, gasoline, diesel and bio-fuels within the energy end markets. The PSI Energy Diesel line includes 10L, 13L, 17L, 20L, 40L, and 53L engines. These engines are an extension of the PSI product line, which is based upon blocks from .998L to 8.8L. All PSI engines feature the same fuel systems and controls, simplifying your application development and support.

GENERAL DATA

- Cast iron cylinder block with inspection door per cylinder
- Cast iron cylinder liners, wet type and replaceable valves guides and seats
- Separate cast iron cylinder heads equipped with 4 valves
- Hardened steel forged crankshaft with induction hardened journals, crankpins and radius
- High temperature circuit with gear driven two coolant pump
- Low temperature circuit with belt driven one coolant pump
- Lube oil cooled light alloy pistons with high performance piston rings
- SAE 0 flywheel housing and 18" flywheel
- Heat shield for exhaust manifold and turbocharger
- The 2 compressors are feeding a single water-air intercooler, mounted over the flywheel housing, with vertical flow
- Air filter with cast iron shell installed on the cylinder head
- 24V electric starter motor in parallel and battery charging alternator



FEATURES

- Electric oil pump, pre-lubricated to ensure good startability
- Lube oil purifier with replaceable cartridge
- High temperature water cooled lube oil cooler
- High pressure common rail system with one high pressure pump gear driven in the V angle of cylinder block
- Three-level filter integrate water separation filter with electric fuel pump

PSI 53-LITER ENGINE DATA

Model Number	53L-D
Cylinders	90°, V-16
Induction System	Turbocharged inter-cooled
Emission Controls	Common rail
Displacement	3,193 cid (52,320 cc)
Fuel Injection System	High pressure common rail
Compression Ratio	15:1
Bore & Stroke	5.91 in x 7.28 in (150 mm x 185 mm)
Fuel Type	Diesel
Direction of Rotation	Counter-clockwise viewed on flywheel
Dry Weight	10,582 lb (4,800 kg)
Certification	EPA Stationary Emergency Certified

POWER RATINGS

STANDBY	60 Hz (1800 RPM)	
	1500 kWe	1680 kWm
	1650 kWe	1850 kWm

kWe values are based on standard assumptions for mechanical and electrical losses. Ratings and performance is subject to site conditions and PSI application and ratings guidelines.