

PRODUCT OVERVIEW

The GRANDWATT 6L5.9TWG natural gas engine delivers the strong power and durability required for generator, water pumper or compressor applications. Its 6-cylinder in-line block, turbocharged and after-cooled engine features:

- Replaceable wet liners
- Water-cooled exhaust
- Water to air after-cooler with an individual radiator

Superior engine performance is provided by an ECM that integrates and coordinates all critical functions including:

- Ignition System • Variable Air Fuel Ratio Control
- Speed Governor • Engine Motor & Protection

The 6L5.9TWG is a dedicated, factory-built natural gas engine that is based on one of the globally popular diesel engines. It shares many of the same parts and components as its diesel counterpart, and it operates on rich-burning & low-cost natural gas.



HEAVY-DUTY 5.9L ENGINE

Industrial Stationary

FEATURES & BENEFITS

➤ Engine Control Module

Constantly monitors engine sensors, Ignition System, Air Fuel Ratio, Speed Governor and fuel system.

➤ High-Energy Ignition System

Performance and longer service intervals, durable spark plugs and coils.

➤ High-Efficiency Cooling System

The High-Efficiency engine radiator, Electric fan and the individual High-Efficiency radiator for the water to air after-cooler, to drive more intake air to the cylinders.

➤ Accessory Belt Drive System

Self-tensioning serpentine polyvee belt accessory drive system for water pump, engine-mounted fan hub and alternator.

➤ Extendable Base Frame

Extendable Base Frame with anti-vibration system allows for easy installation of alternator, water pump or compressor.

➤ Optional Control System For Generator Set

Auto & remote start controller with multi-protection & monitors are inside a weather proof enclosure. The highly protective wire harness is adjustable for any configuration.



Greener • Durable • Economical

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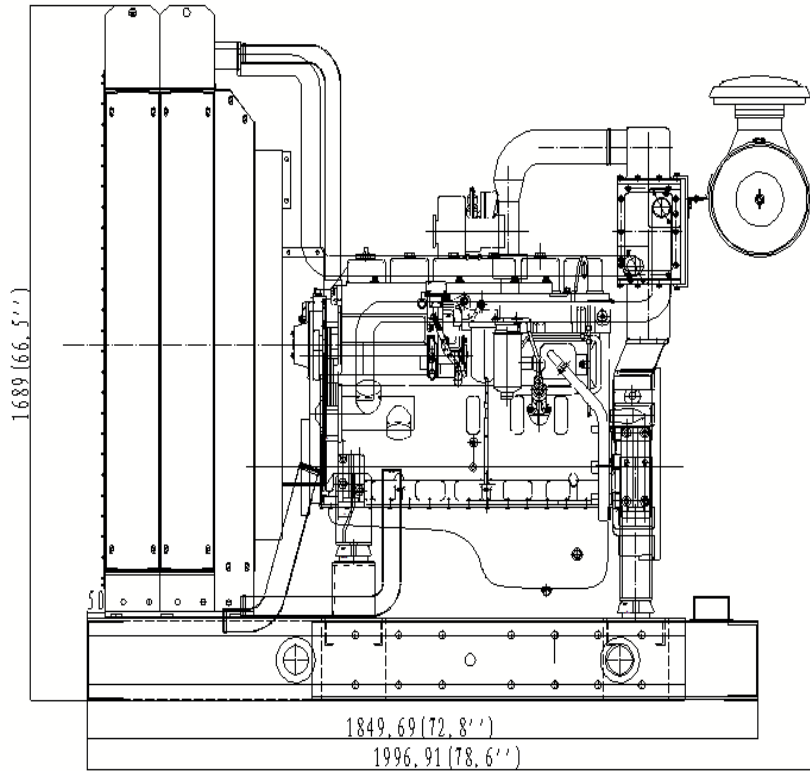
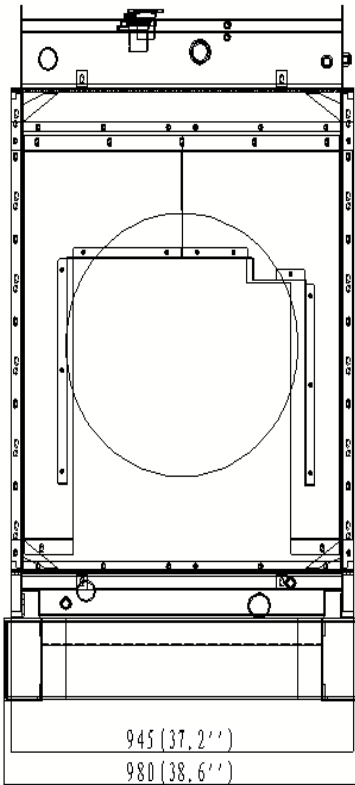
Natural Gas Engine Kit

6L5.9TWG SPECIFICATIONS

Standard Configuration	Std		Metric	
	1500 rpm	1800 rpm	1500 rpm	1800 rpm
General Data				
Number & Type of Cylinders	6 In-Line			
Aspiration	Turbocharged with water after cooler			
Total displacement	360 In ³		5.9 Liters	
Bore & Stroke	4.0 in × 4.7 in		102 mm × 120 mm	
Compression Ratio	10.5 : 1			
Mean Piston Speed	19.69 ft/s	23.62 ft/s	6.0 m/s	7.2 m/s
Dry Weight (Only Engine)	1250 lb		570 kg	
Power Rating				
Gross Standby Power (without Fan)	138 Hp	136 Hp	103 kw	101 kw
Net Standby Power (with Fan)	132 HP	130 HP	98 kw	97 kw
Gross Prime Power (without Fan)	125 HP	124 HP	93 kw	92 kw
Net Prime Power (with Fan)	119 HP	118 HP	89 kw	88 kw
Cooling System				
Engine Coolant System Capacity	8.2 Gallons		31 Liters	
Turbocharge Coolant System Capacity	8.5 Gallons		32 Liters	
Rated Ambient Temp. of Radiator	104 F		40 ° C	
Max allowable Coolant Temperature	217 F (@ 100% Rated Load)		103 ° C (@ 100% Reated Load)	
Lubrication System				
Engine Oil Capacity	4.5 Gallons		17 Liters	
Max allowable Oil Temperature	250 F		121 ° C	
Oil Pressure at Rating Speed	30-50 psi	30-50 psi	207-345 kPa	207-345 kPa
Exhaust System				
Type	非 Water Cooled Manifold			
Max allowable Back Pressure	40 inH ₂ O	40 inH ₂ O	10 kPa	10 kPa
Max allowable Turbine Inlet Temp.	1202 F	1202 F	650 ° C	650 ° C
Air Induction System				
Max allowable Intake Air Restriction				
with Clean Air Filter	16 inH ₂ O	16 inH ₂ O	4 kPa	4 kPa
with Dirty Air Filter	24 inH ₂ O	24 inH ₂ O	6 kPa	6 kPa
Combustion Air required (volume)	222 cfm	222 cfm	6.28 m ³ /min	6.28 m ³ /min
Fuel System				
Fuel Consumption @ Rated Load	50.7 lb/hr	59.5 lb/hr	23 kg/hr	27 kg/hr
Max EPR Rated Pressure	50-70 psi	50-70 psi	350-500 kPa	350-500 kPa
Electric System				
Electric system Voltage	24 VDC			
Minimum Battery Capacity	150 AH			
Battery Charging Alternator Current	40 A			
Base Frame				
Two Stages Extendable Base Frame				
Anti-vibration System				
4 pcs Vibration Absorbers of 880 lb.		4 pcs Vibration Absorbers of 400 kgf		

POWER YOUR IMAGINATION

6L5.9TWG DIMENSIONS



The Engine Supplier

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