

# PowerTechE 6.8L

G-Drive NonCertified Diesel engine **250 kVA**



## Description

PowerTechE 6.8L is a premium heavy-duty Generator Drive Diesel engine aimed at non-emissions regulated markets as well as stationary applications in EU.

Available in either bare or power unit configuration, this engine platform covers 225 & 250 kVA prime in dual frequency ratings.

Based on simple, straightforward technology, PowerTechE 6.8L is designed and manufactured in France (facility certified to ISO 9001). 250 kVA engine also complies with RoHS 2 directive and CE certification.



Dual Frequency Ratings



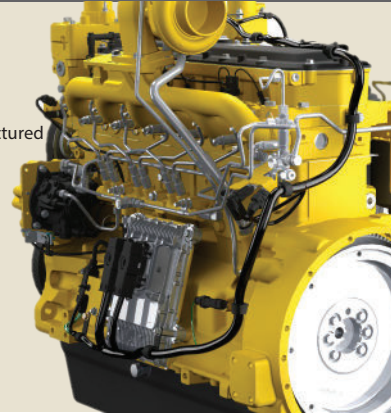
Designed and manufactured in facility certified to ISO 9001 & ISO 14001



Engine meets EU Directive 2011/65/EU



Compatible with John Deere PowerAssist™ app



## Performance data

Power node (prime)		225 kVA prime/250 kVA stand-by					250 kVA prime/275 kVA stand-by				
Speed	Operation	Engine		Gen drive rating			Engine		Gen drive rating		
		kW (Gross)	Fan power	Gen eff.	kVA	KWe	kW (Gross)	Fan power	Gen eff.	kVA	KWe
1500 rpm – 50 Hz	Prime power	205	11.3	93%	225	180	228	12.5	93%	250	200
	Standby power	225	11.3	93%	248	199	250	12.5	93%	276	221
1800 rpm – 60 Hz	Prime power	214	11.8	93%	235	188	237	13.0	93%	260	208
	Standby power	235	11.8	93%	260	208	260	13.0	93%	287	230

## Features & Benefits

### PERFORMANCE WITHOUT COMPROMISE

- **Exceptional load acceptance**  
Unrivaled block loading capability. Class G3 (ISO 8528-5). Turbocharging and air to air after cooling provides high power density and fuel efficiency.
- **Performance in extreme conditions**  
Superior cold starting, high altitude capability, two stage fuel filtration with water detection.
- **Dual frequency ratings**  
50 Hz/60 Hz switchable. Fits all regions of the world.
- **RoHS 2 compliant**  
Engine meets EU Directive 2011/65/EU (Restriction of Hazardous Substances).

### RELIABLE UPTIME

- **Day-to-day reliability**  
PowerTech heavy duty design, oversized components, replaceable (wet) cylinder liners, engine made in France. Injection system compatible with high sulfur fuel.
- **Extensive worldwide service network**  
4000+ service locations worldwide, 1 500+ service locations in Europe, qualified service technicians
- **Fast delivery of maintenance & replacement parts**  
Worldwide parts distribution system, with overnight delivery in most regions.
- **John Deere warranty: confidence is built in**  
Best-in-class coverage. Standard warranty 2 years/2000 hours. Extended warranty up to 5 years/5000 hours

### LOW OPERATING & OWNERSHIP COST

- **Long haul durability**  
Engine proven by John Deere heavy duty applications
- **Long service interval**  
500-hour maintenance interval (oil & fuel filters), 4000-hour coolant drain interval.
- **Easy maintenance**  
Self-adjusting poly V belt, washable air filter, replaceable (wet) cylinder liners for easy engine overhaul, maintenance free gear timing
- **Single side service option**  
All maintenance related options located on right hand side (oil filter, oil dipstick, oil filler, oil drain, fuel filter)

### EASY INTEGRATION

- **High power density**  
250 kVA downsized from 9.0L to 6.8L platform. Impressive power density, allowing generator manufacturers to use smaller canopy size.
- **Single side service option**  
All maintenance related options located on right hand side (oil filter, oil dipstick, oil filler, oil drain, fuel filter)
- **High flexibility of integration**  
Wide option & accessories selector. Factory-mounted power unit available, designed for tropical conditions. Includes radiator, front feet, radiator bracket & air filter.
- **Ready Spec available**  
Ready-to-go specification available with reduced 6-week lead-time

## General Data

Model (Bare/Power Unit)	6068HFG55 / 6068HFU55
Configuration	6 cylinders, inline
Type	4-stroke
Displacement	6.8L
Bore and stroke	106 x 127 mm
Compression ratio	17.2 : 1
Rotation	Counterclockwise
Injection type	Electronic (HPCR)
Aspiration	Turbocharged (air to air cooled)
Starter	4.2 kW, 12V
Alternator	90 amp, 12V
Total lubricating capacity	32.5L
Service	Right hand side
Flywheel housing	SAE 3
Flywheel	11.5"
Cooling system	Water-cooled

## Power Unit data

Model (Power Unit)	6068HFU55
Cooling system design	Radiator/CAC
Radiator material	Copper
Coolant ratio	50% ethylene glycol/50 % water
Engine coolant capacity	12.7L
Radiator coolant capacity	18.8L
Air filter	Dry type

## Fuel consumption (kg/h)

Frequency	Operation	25%	50%	75%	100%
1500 rpm– 50 Hz	Prime power	12.6	23.3	34.3	45.1
	Standby power	13.9	25.4	37.6	48.9
1800 rpm– 60 Hz	Prime power	13.1	23.8	34.7	45.1
	Standby power	14.2	25.6	37.5	49.9

## Optionality (Bare engine only)

		Standard	Optional
<b>General</b>	Voltage	● 12V	○ 24V
	Default speed (dual frequency ratings)	● 1500 rpm	○ 1800 rpm
	Crankshaft pulley	● Standard duty damper	○ Heavyduty damper
	Crankshaft add-on pulley	● Not included	○ Provision for aux. drive pulley
	Paint	● Industrial tan	○ Black, yellow, green, white
<b>Cooling system</b>	Fan pulley	● 168 mm	○ 203 mm
	Fan height	● 290 mm	○ 258/338/402 mm
	<b>Air system</b>	Air filter	● Not included
Air restriction indicator		● Not included	○ Mounted on air filter
Crankcase Ventilation system		● With vent hose	○ OCV
<b>Integration</b>	Exhaust adapter	● Not included	○ Steel/Cast iron
	Block heater	● Not included	○ Coolant heater, 110V/220V

## Physical data

Dimensions	Bare	Power Unit
Length	1123 mm	1790 mm
Width	604 mm	1010 mm
Height	1084 mm	1330 mm
Weight, dry	730 kg	900 kg

### Ratings definitions

**Prime power** is the nominal 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.

**Standby power** is the nominal engine power available at varying load factors for up to 500 hours per year. This rating conforms to ISO 3046 and SAE J1995. The calculated generator set rating range for standby applications is based on minimum engine power (nominal 5%) to provide 100% meet-or-exceed performance for assembled standby generator sets.

