

PowerTech E 9.0L

G-Drive Non-Certified Diesel engine **300 kVA**



JOHN DEERE

Description

PowerTech E 9.0L 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 300 prime node in dual frequency ratings.

Based on simple, straight-forward technology, PowerTech E 9.0L is designed and manufactured in USA (facility certified to ISO 9001).



Dual
Frequency
Ratings



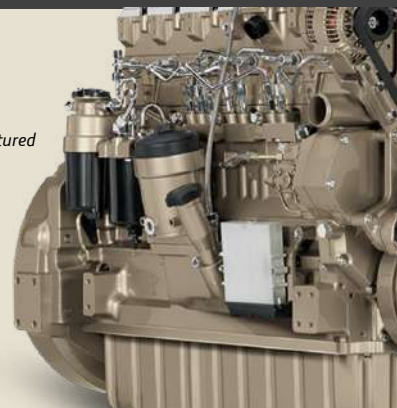
Designed and manufactured
in facility certified to
ISO 9001 & ISO 140001



Monitored remotely
with JDLink™
telematics solution



Compatible
with John Deere
PowerAssist™ app



Performance data

Power node (prime)		300 kVA prime/330 kVA stand-by				
Engine Speed	Operation	Engine		Gen drive rating		
		kW (Gross)	Fan power	Gen eff.	kVA	KWe
1500 rpm – 50 Hz	Prime power	277	15.2	93%	304	243
	Standby power	304	15.2	93%	336	269
1800 rpm – 60 Hz	Prime power	287	15.8	93%	315	252
	Standby power	315	15.8	93%	348	278

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.
- **Monitored remotely**
Compatible with JDLink telematics solution. Advanced tracking, diagnostic, and prognostic technologies.

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**
Impressive power density, allowing gen-set 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 selection to ensure easy integration.
- **Factory-mounted power unit available**
Cooling package designed for tropical conditions. Includes radiator, front feet, radiator bracket & air filter.

General Data

Model (Bare engine)	6090HFG84
Configuration	6 cylinders, in-line
Type	4-stroke
Displacement	9.0L
Bore and stroke	118.4 x 136 mm
Compression ratio	16.0 : 1
Rotation	Counterclockwise
Injection type	Electronic (HPCR)
Aspiration	Turbocharged (air to air cooled)
Starter	4.5 kW, 12V
Alternator	90 amp, 12V
Total lubricating capacity	40L
Service	Right hand side
Flywheel housing	SAE 2
Flywheel	11.5"
Cooling system	Water-cooled

Power Unit data

Model (Power Unit)	6090HFU84
Cooling system design	Radiator/CAC
Radiator material	Copper
Coolant ratio	50% ethylene glycol – 50% water
Engine coolant capacity	16L
Radiator coolant capacity	N/A
Air filter	Dry type

Fuel consumption (kg/h)

Frequency	Operation	25%	50%	75%	100%
1500 rpm – 50 Hz	Prime power	17.1	34.2	47.3	60.0
	Standby power	18.8	37.6	50.9	65.1
1800 rpm – 60 Hz	Prime power	18.3	35.7	50.8	61.0
	Standby power	20.1	39.1	55.1	64.3

Optionality (Bare engine only)

		Standard	Optional
General	Voltage	● 12V	○ 24V
	Default speed (dual frequency ratings)	● 1500 rpm	○ 1800 rpm
	Crankshaft pulley (damper)	● Single damper	○ Dual damper
	Flywheel housing	● SAE 2	○ SAE3/SAE1
	Flywheel	● 11.5"	○ 14"
	Paint	● Industrial tan	○ Black, yellow, green, white
Cooling system	Fan drive	● Fixed, 442 fan height	○ Adjustable
	Thermostat cover	● Vertical outlet	○ Horizontal outlet
Air system	Crankcase Ventilation system	● With vent hose	○ OCV system
Integration	Exhaust adapter	● Not included	○ Included
	Customer panel Interface harness	● Not included	○ Included
	Extension harness	● Not included	○ 1,5 m /3,7 m
Starting aids	Cold start aid	● Not included	○ Air inlet heater
	Block heater	● Not included	○ Coolant heater, 110V/220V

Physical data

Dimensions	Bare	Power Unit
Length	1208 mm	1770 mm
Width	630 mm	1080 mm
Height	1113 mm	1630 mm
Weight, dry	901 kg	1080 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.

