



Variable Speed Generator

T1V-GEN T1VG-160PD

Type: T1V-GEN
Model: T1VG-160PD

Prime Rated Power 110kW/138kVA
Standby Rated Power 125kW/156kVA



STANDARD FEATURES

- **Brushless alternator** reduces service and maintenance requirements and meets temperature rise standards for Class H insulation systems.
- **Automatic voltage regulator (AVR)** provides precise voltage regulation.
- **Digital controller** includes generator and engine metering, engine safeties, engine control, LCD display, CAN bus communication, event Logger, USB programming port, LED alarm indicator, remote start/stop, programmable remote alarm.
- **Automatic safety shutdowns** monitor the water temperature, engine oil pressure, engine temperature, over speed / under speed. Warning lights indicate abnormal conditions.
- **Auto start/stop control** allows generator to start and stop automatically when required.
- **Fuel/water separator** removes condensation from fuel.
- **EPA emissions certified** tier 3 interim tier 4.



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Specifications

Engine Specifications	
Make/Model	John Deere 6068HF485
Emissions	EPA Tier 3 interim Tier 4 certified
Starting System	Electric
Design	In-line 4 cycle, turbocharged
Displacement (liters)	6.8
No. Cylinders	6
Bore x Stroke (mm)	4.19 x 5.00 (106 x 127)
Gross Engine Power Output	250 hp (187kW)
BMEP psi (kPa)	199 (1375)
Compression Ratio	17.0 : 1
Engine Speed RPM	800 – 2400

Fuel System	
Supply line, min. ID, mm (in)	8 (5/16)
Return line, min. ID, mm (in)	4.8 (3/16)
Recommended fuel	#2 Diesel

Fuel consumption	
Full load lph (gph)	38 (10)
75% load lph (gph)	26 (6.9)
50% load lph (gph)	18.8 (4.9)
25% load lph (gph)	6.8 (1.8)

Cooling System	
Coolant flow rate L/minute (g/min)	346L (91)
Heat Rejection from Engine BTU/minute	5683 BTU
Coolant Capacity (with radiator)	29.9L

Noise Signature	
100% load @ 23 feet	67 dBA

Exhaust System	
Gas Flow (full load)	1251 cfm (35m3/min)
Gas Temperature	714°F (379°C)
Maximum Back Pressure	40 in H ₂ O (10kPa)

Amperage	
Rated Voltage	Maximum Amps
1Ø 120 Volt	833 Amps (4 wire)
1Ø 240 Volt	395.8 Amps (4 wire)
3Ø 240 Volt	376.3 Amps
3Ø 480 Volt	188.1 Amps
3Ø 208 Volt	434 Amps

Generator Specifications	
Make/Model	Marathon 363CSL1607
No. of Poles	4-pole
Excitation	Brushless with AVR
Standby Output	125kW (160KVA)
Prime Output	110kW (138KVA)
Generator RPM	1800
Voltage - 3Ø	208, 220, 240, 416, 440, 480V
Voltage - 1Ø	120, 127, 139, 240, 254, 277V
Voltage Regulation (Steady state)	± 1.0%
Power Factor	0.8
Frequency	60Hz
Frequency Regulation: At Full Load	±0.25% of mean value for constant loads from no load to full load
Insulation	Class H

WARRANTY

JOHN DEERE ENGINE

12 months from date of purchase and unlimited hours or 24 months from date of purchase with 2000 hours (whichever occurs first).

*Refer to the express written, Engine warranty sheet for additional coverage information

GENERATOR

12 months from date of purchase and unlimited hours or 24 months from date of purchase with 2000 hours (whichever occurs first).

*Refer to the express written, one-year limited warranty sheet for additional information





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OPTIONAL GENERATOR FEATURES

- **Battery charger** – provides fully automatic and self adjusting charging to the generator's battery system.
- **Solar battery charger** – provides fully automatic and self adjusting charging to the generator's battery system.
- **Jacket water heater** – for easy starting in cold weather climates
- **Trailer mounted package** – Highway legal trailer with electronic or surge brakes with single or double axle configuration. Extra capacity fuel tanks are also available.
- **PMG** – Permanent magnet generator.
- **DVR** – Digital voltage regulator.

OPTIONAL FUEL TANK FEATURES

- **Trailer fuel tank** – a second fuel cell located in the trailer allows for extended run time.
- **Sub-base fuel tank (single wall / double wall)** – Additional fuel cell for extended runtime operation. Contains a leak sensor, low fuel switch and a secondary containment tank.
 - 24 hours of minimum run time.
 - 48 hours of minimum run time.
 - 72 hours of minimum run time.

OPTIONAL OUTPUT CONNECTIONS

- **Cam-Lok** – provides quick disconnect alternative to bolt-on connectors.
- **Pin and Sleeve Connectors** – provides industry standard connectors for all voltage requirements.
- **Output Cable** – available in any custom length and size configuration.
- **Voltage selector switch**



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