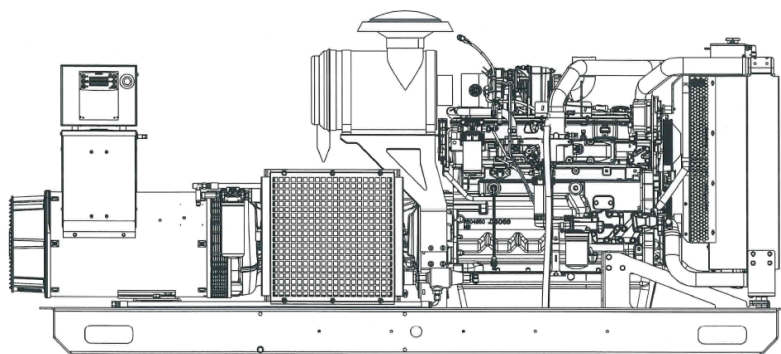


VARIABLE SPEED GENERATOR SET

Model **VariGen™ 125**
Number **P06-J1M5-A (VG-125)**

STANDBY 125 kW / 156 kVA
PRIME 110 kW / 138 kVA
480V / 3Phases / 60Hz



DESCRIPTION

CVT Corp's patented variable speed genset revolutionizes power generation. By automatically adjusting engine speed to power demand, CVT Corp's fully integrated variable speed power generation system uses the engine more efficiently for a given load. This enables significant fuel savings and reduced noise when power demand is low, all while prolonging engine life.

The VG-125 units are individually tested at factory, including a demonstration of full power and one step load pick-up.

STANDARD FEATURES

- CVT Corp's unique VariGen™ 125 delivers:
 - Automatic adjustment of engine speed to sudden power demand
 - Lower fuel consumption than conventional gensets
 - Extended engine life
 - Reduced noise
- Generator features:
 - Class H insulation system
 - Brushless design
- Control system:
 - Very fast recovery from load changes (Block Loads)
 - One step load acceptance

The **standby rating** should be used in installations where the generator set is intended to backup a main utility source. During a power outage varying loads may apply. No overload capacity is available for standby rating.

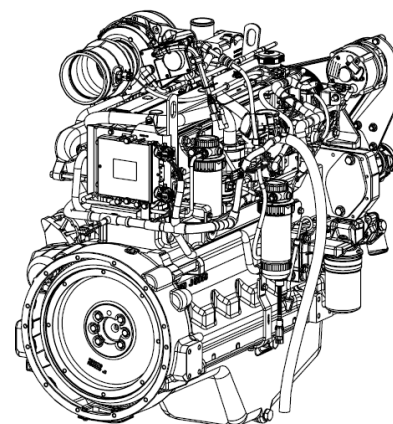
The **prime power rating** should be used in installations where the genset is intended as the main utility source. The generator set can supply continuously varying loads. A 10% overload capacity is available one hour in twelve for prime rating.

Guidelines for deration: Derate 5% per 300m (1000ft) elevation above stated turbo altitude capability. ECU Compensated for every 5.5°C above 25°C.

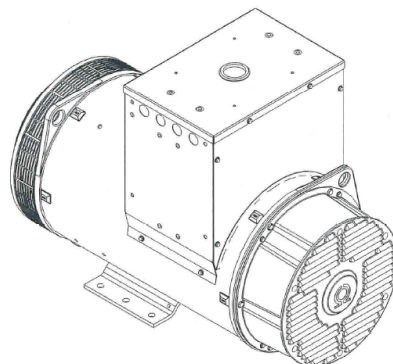
Ratings are in accordance with ISO-3046/1 and ISO-8528/1.

All Ratings for three phase units are for 0.8 power factor.

ENGINE SPECIFICATIONS

MANUFACTURER
JOHN DEERE
MODEL
6068HF485
TYPE
IN-LINE, 4-CYCLE
NUMBER OF CYLINDERS
6
MAXIMUM RATING
kW (hp)
186 (250)
AT SPEED
rpm
2400
MAXIMUM TORQUE
Nm (lb. ft)
934 (689)
MINIMUM IDLE SPEED
rpm
800
BSFC (g/kWh (lb/hp h) @ rpm)
213 (0.350) @ 2400
NOISE AT RATED POWER (ISO 3744)
dBA
94.3
OIL AND OIL FILTER MAINTENANCE INTERVAL FOR REPLACEMENT
hours 500
WEIGHT, WITH OIL (STANDARD CONFIGURATION)
kg (lb)
678 (1495)
STANDARD CONFIGURATION
FLYWHEEL HOUSING
SAE
3
FLYWHEEL DIAMETER
in
11.5
EXHAUST MOUNTING FLANGE
INCLUDED
STARTER MOTOR
12 V
ALTERNATOR
12 V
PAINT
COLOR
YELLOW-BLACK
THERMODYNAMIC CYCLE
DIESEL 4 STROKE – D.I.
BORE X STROKE
mm (in)
106 x 127 (4.19 x 5.00)
TOTAL DISPLACEMENT
liters (cu. in.)
6.8 (415)
VALVES PER CYLINDER
2/2
COOLING
LIQUID
DIRECTION OF ROTATION (VIEWING FACING FLYWHEEL)
CCW
AIR INDUCTION
AIR REQUIREMENT FOR COMBUSTION AT 100% LOAD/RATED
SPEED
ft³/min
599
EXHAUST SYSTEM
EXHAUST FLOW AT MAX OUTPUT
m³/min (ft³/min)
35 (1251)
COOLING SYSTEM
HEAT REJECTED TO COOLANT AT MAX POWER
BTU/MIN (kW)
5683 (99.8)
FUEL SYSTEM
GOVERNOR TYPE
ELECTRONIC
ELECTRONICAL SYSTEM
VOLTAGE
V
12


GENERATOR SPECIFICATIONS

MANUFACTURER
MARATHON ELECTRIC
MODEL
363CSL1607
ELECTRONICAL CHARACTERISTICS
FREQUENCY
Hz
60
VOLTAGE (SERIES STAR)
V
480
RATED POWER CLASS F CONTINUOUS DUTY
kVA
169
kW
135
INSULATION CLASS
H
EXECUTION
BRUSHLESS
STATOR WINDING
12 ENDS
ROTOR
WITH DAMPING CAGE
WEIGHT OF COMPLETE GENERATOR
lbs
943
MAXIMUM OVERSPEED
rpm
2250
COOLING AIR REQUIREMENT
CFM
700


CONTINUOUSLY VARIABLE TRANSMISSION (CVT) SPECIFICATIONS AND CONTROLLER

CVT-100

MANUFACTURER
MODEL

CVT CORP.
CVT-100 (P06-0000-B)

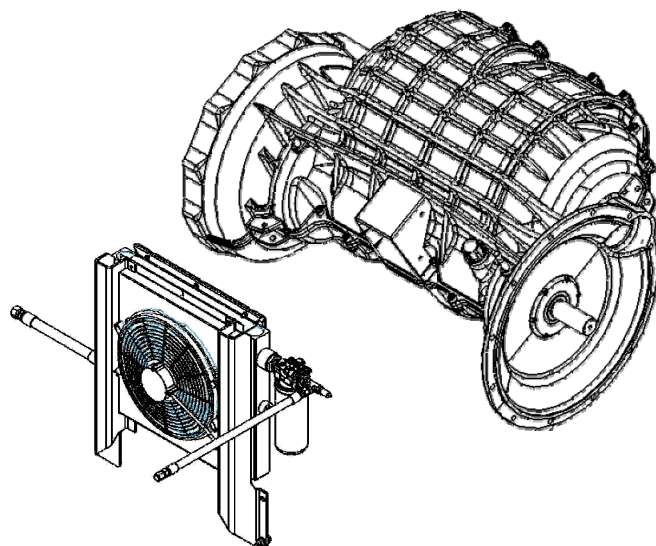
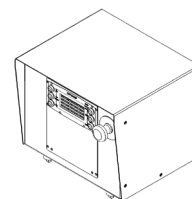
TYPE FULL TOROIDAL TRACTION CVT
MAX. OUTPUT POWER kW (HP) 125 (168)
MAX. INPUT TORQUE NM (LB.FT) 600 (442)
MIN./MAX. OIL OPERATING TEMP. -25°C/90°C
RATIO (AVAILABLE RANGE) 0.45 TO 2.24 CONTINUOUSLY
RATIO (OPERATING RANGE) 0.67 TO 1.60 (50HZ)
0.59 TO 1.33 (60HZ)

CONTROLLER
MANUFACTURER
MODEL

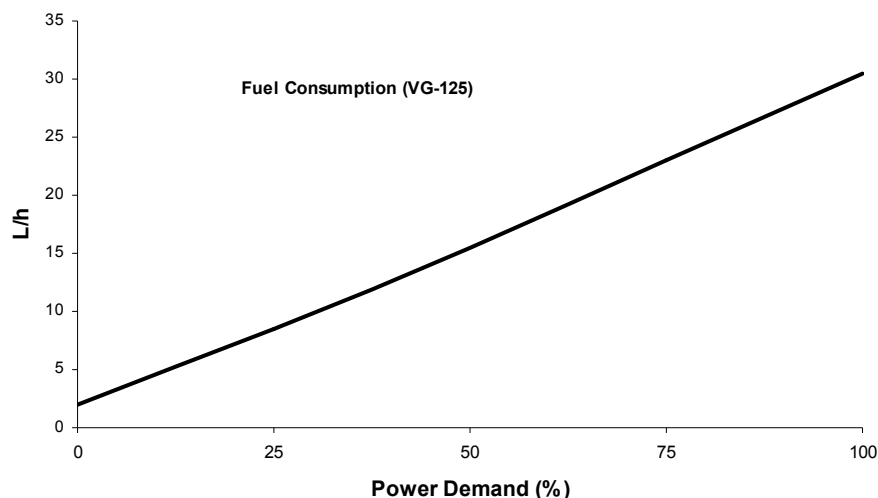
CVT CORP.
VG-CTR-100 (E05-0000-0)

FEATURES AUTOMATIC ENGINE SPEED CONTROL
DEPENDENT ONELECTRICAL LOAD
MANUAL ENGINE SPEED CONTROL

SHUTDOWNS OVERSPEED, UNDERSPEED
ENGINE AND CVT OVERTEMP
OVERCRANK
SENSOR FAILURE
EMERGENCY STOP BUTTON
DISPLAY J1939 ENGINE INFO
CVT INFO (TEMP AND SPEED IN/OUT)
TOTAL HOURS
REAL TIME CLOCK
BATTERY VOLTAGE
VOLTAGE, CURRENT, FREQUENCY



VARIGEN™ 125 CONSUMPTION



VARIGEN™ 125 DIMENSIONS AND WEIGHT

Dry Weight lbs (kg) 3750 (1705)

