

**ENGINE TEST [4EK05247]****AUGUST 20, 2018****(4EK05247)-ENGINE (9GZ00620)-GENERATOR**For Help Desk Phone Numbers [Click here](#)**Sales Model:** 3516**Built Date:** 05Aug2008**Tested Date:** 11Aug2008**Shipped Date:** 26Aug2008**Tested:** B**Plant:** Lafayette**Cell Number:** 510

Test Element	Eng Updates	Test Value	Test Spec Value	Measure
Spec Number		0K4596	0K4596	
Arrangement Number		1656135	1656135	
CORR FL PWR		1,144	1,148	HP
Speed		1,196	1,200	RPM
CORR FL FUEL RATE		136,206.4	134,542.6	BTU/MIN
CSFC		7,143	7,033	BTU/HP-H
Jacket Water Temp		192	192	F
IN SCAC H2O		127	129	F
Compressor Out Pressure		37.57	37.42	PSIA
Inlet Manifold Pressure		33.36	33.07	PSIA
Excess Oxygen		8.8	9.2	%
FL Oil Press		67	67	PSI
High Speed		1,200	1,200	RPM
Low Idle Speed		900	900	RPM
Low Idle Oil Pressure		66	65	PSI
Fuel Pressure		17	17	PSIA
Advertised Power			1,148	hp
Advertised Speed			1,200	RPM

Caterpillar Confidential: **Green**

Content Owner: Commercial Processes Division

Web Master(s): [PSG Web Based Systems Support](#)

Current Date: 8/20/2018, 4:02:20 PM

© Caterpillar Inc. 2018 All Rights Reserved.

[Data Privacy Statement](#).



ESO Number: DDPLN00  
 Engine Serial #: 4EK05247

## Generator Set Specifications

---

<u>Engine</u>	<u>Generator</u>	<u>System</u>
Engine Sales Model: 3516SITASCAC	Package Serial No.	Test Date: 15-Aug-2008 9:46
Engine Size: 3516	Serial Number: 9GZ00620	
Fuel Type: SI	Genset Arr:	Run No.: 1
Engine Arr.: 1656135	Genset Model: A913	Data ID:
Dyno Test Spec: 0K4596	Frame Size:	Test Type: OPERATIONS
Rated Speed: 1200 RPM	Electrical Rating: 810 KW	Pass/Fail: PASSED
Cooling System: SCAC	Rated Frequency: 60 Hz	Test Cell: 518
Aspiration Type: TA	Rated Voltage: 4160 Volts	Facility:
	Rated P.F.: 0.80	P.L. Setting:
	Tested: Without Fan	Test Spec:
		Procedure:

### Load Steps

Static Test					Transient Test				Load Reject Test					
<u>Step No</u>	<u>Load</u>	<u>Units</u>	<u>PF</u>	<u>Step Time (Min)</u>	<u>Step No</u>	<u>Initial</u>	<u>Final</u>	<u>Units</u>	<u>PF</u>	<u>Step No</u>	<u>Initial</u>	<u>Final</u>	<u>Units</u>	<u>PF</u>
1	810	KW	0.80	1.00										

## Test Tolerances

---

**Static Steps**

Line Voltage (+- %)  
Avg Voltage (+- %)  
Current (+- %)  
Power Factor (+-)  
Comment:

**Full Load Point**

Power (+ %)  
Power (- %)  
Speed (+- rpm)  
Frequency (+- Hz)  
Comment:

**Transient Frequency**

Overshoot (%)  
Undershoot (%)  
Recovery Band (+- %)  
Recovery Time (sec)  
Steady State Band (+- %)  
Steady State Time (sec)  
Comment:

**Transient Voltage**

Overshoot (%)  
Undershoot (%)  
Recovery Band (+- %)  
Recovery Time (sec)  
Steady State Band (+- %)  
Steady State Time (sec)  
Comment:

**Load Reject**

Frequency Band (+- %)  
Voltage band (+- %)  
Stability Interval (sec)  
Evaluation interval (sec)  
Comment:

**High Idle Stability and No-Load Poin**

Frequency band (+- %)  
Evaluation interval (sec)  
Min Speed (rpm)  
Max Speed (rpm)  
Comment:



# Test Report

ESO Number: DDPLN00  
 Engine Serial #: 4EK05247

Generator Serial #:	9GZ00620	Fuel Type:	SI	Test Date:	15-Aug-2008 9:46
Dyno Test Spec:	0K4596	Cooling System:	SCAC	Pass/Fail:	PASSED
Engine Arr.:	1656135	Test Cell:	518	ECM Codes:	No
		Test Run No.:	1		
		Tested:	W/O Fan		

No Load	Amount from Nominal	Measured	Specification
High Idle Speed	0 RPM	1200 RPM	1200 RPM
Phase A Volts	0.0 %	4162 V	4160 V
Phase B Volts	0.0 %	4159 V	4160 V
Phase C Volts	-0.1 %	4158 V	4160 V
Test Voltage	0.0 %	4160 V	4160 V

Full Load	Amount from Nominal	Measured	Specification
Rated Engine Speed	0 RPM	1200 RPM	1200 RPM
Power	0.1 %	810.6 kW	810 kW
Corrected Power	0.1 %	810.5 kW	810 kW
Correction Factor	1.0000	1.0000	none
Frequency	0.0 %	60.0 Hz	60 Hz
Phase A Volts	0.2 %	4169 V	4160 V
Phase B Volts	0.3 %	4173 V	4160 V
Phase C Volts	-0.6 %	4133 V	4160 V
Test Voltage	0.0 %	4159 V	4160 V
Phase A Current	-1.3 %	139 Amp	141 Amp
Phase B Current	-4.0 %	135 Amp	141 Amp
Phase C Current	1.8 %	143 Amp	141 Amp
Test Current	-1.1 %	139 Amp	none Amp
Power Factor	0.0 %	0.800	0.800
Comp Outlet	-	136.64 KPa	
Gas Supply	-	115.86 KPa	
Inlet Manifold	-	93.7 KPa	1.0 KPa
Throttle Delta	-	42.9 KPa	1.0 KPa
Exhaust O2	-	-18.27 %	1.00 %
Exhaust NOX	-	-620 ppm	1 ppm

	Load		Voltage Response				Frequency Response			
	Nom	From Nom	Volt Rcvry	ST State Rcvry	Volt Peak	Volt Valley	Freq Rcvry	ST State Rcvry	Freq Peak	Freq Valley
	kW	%	s	s	%	%	s	s	%	%
0	0	0.0	0.0	0.0	20.3	2.3	0.0	0.0	20.4	0.4



ESO Number: DDPLN00  
Engine Serial #: 4EK05247