

**Generating Set Functional Test Report**  
In accordance with ISO 8528 - 6 2005

PLANT NUMBER:

EG910/1

CE:

NO

RATED OUTPUT	KVA	<u>40</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>32</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>400/230</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>58</u>		(AS DEFINED BY ISO 8528-1)	
	HZ	<u>50</u>			
	RPM	<u>1500</u>			
GOVERNOR TYPE	<u>Mechanical</u>	COOLING METHOD	<u>WATERCOOLED</u>		

ENGINE MAKE	<u>PENKINS</u>	BUILD NUMBER	<u>DVA 51435</u>
ENGINE MODEL	<u>1103A-33TG1</u>	SERIAL NUMBER	<u>U2467394</u>
ALTERNATOR MAKE	<u>STANFORD</u>		
ALTERNATOR MODEL	<u>PELLET</u>	SERIAL NUMBER	<u>0269438/001</u>
CONTROL PANEL(S)	<u>AUD START</u>	SERIAL NUMBER(S)	
SWITCHGEAR	<u>A-T-S</u>	SERIAL NUMBER(S)	

**LOAD TEST RESULTS (AT UNITY POWER FACTOR)**

LOAD TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	<u>90</u>	<u>50.4</u>	<u>400</u>	<u>42</u>	<u>28.8</u>	<u>-</u>	<u>-</u>	<u>5.1</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>400</u>	<u>51</u>	<u>35.2</u>	<u>83</u>	<u>-</u>	<u>4.0</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M)

75

(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	<u>Sea Level</u>	FUEL SPEC	<u>BS2869A2</u>
BAROMETRIC PRESSURE (kpa)	<u>101.7</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>14</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>88</u>	LUB OIL SPEC	<u>Multigrade</u>

**WIRING DIAGRAMS:**

ENGINE	<u>06-130700</u>	CONTROL PANEL(S)	<u>10-170300</u>
			<u>10-173300</u>

TESTED BY

I. JOHNSON

DATE

21/09/2010

**Generating Set Functional Test Report**  
In accordance with ISO 8528 - 6 2005

PLANT NUMBER: EQ910/2 CE: NO

RATED OUTPUT	KVA	<u>40</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>32</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>400/230</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>58</u>		(AS DEFINED BY ISO 8528-1)	
	HZ	<u>50</u>			
	RPM	<u>1500</u>			
GOVERNOR TYPE	<u>Mechanical</u>	COOLING METHOD	<u>WATERCOOLED</u>		

ENGINE MAKE	<u>PERKINS</u>	BUILD NUMBER	<u>DKS1435</u>
ENGINE MODEL	<u>1103A-33TG1</u>	SERIAL NUMBER	<u>U2467421</u>
ALTERNATOR MAKE	<u>STAMFORD</u>		
ALTERNATOR MODEL	<u>PL46J</u>	SERIAL NUMBER	<u>0169438/002</u>
CONTROL PANEL(S)	<u>AUD STANST</u>	SERIAL NUMBER(S)	
SWITCHGEAR	<u>A-T-S</u>	SERIAL NUMBER(S)	

LOAD TEST RESULTS (AT UNITY POWER FACTOR)								
LOAD TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP	OIL TEMP	OIL PRESS
						DEG C	DEG C	BAR
load acceptance	<u>90</u>	<u>50.5</u>	<u>400</u>	<u>42</u>	<u>28.8</u>	<u>-</u>	<u>-</u>	<u>4.8</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>400</u>	<u>51</u>	<u>35.2</u>	<u>84</u>	<u>-</u>	<u>4.0</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP  
 AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M) 75  
 (UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	<u>Sea Level</u>	FUEL SPEC	<u>BS2869A2</u>
BAROMETRIC PRESSURE (kpa)	<u>101.7</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>14</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>88</u>	LUB OIL SPEC	<u>Multigrade</u>

WIRING DIAGRAMS:			
ENGINE	<u>06-130700</u>	CONTROL PANEL(S)	<u>10-170300</u>
			<u>10-173300</u>

TESTED BY I. JOHNSON DATE 21/09/2010

## Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER:

EQ910/3

CE:

NO

RATED OUTPUT	KVA	<u>40</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>32</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>400/230</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>58</u>		(AS DEFINED BY ISO 8528-1)	
	HZ	<u>50</u>			
	RPM	<u>1500</u>			
GOVERNOR TYPE	<u>Mechanical</u>	COOLING METHOD	<u>WATERCOOLED</u>		

ENGINE MAKE	<u>PENINS</u>	BUILD NUMBER	<u>DKS143S</u>
ENGINE MODEL	<u>W03A-33TG1</u>	SERIAL NUMBER	<u>U246745U</u>
ALTERNATOR MAKE	<u>STANFORD</u>		
ALTERNATOR MODEL	<u>PILET</u>	SERIAL NUMBER	<u>0269438/003</u>
CONTROL PANEL(S)	<u>AUTO START</u>	SERIAL NUMBER(S)	
SWITCHGEAR	<u>A-T-S</u>	SERIAL NUMBER(S)	

### LOAD TEST RESULTS (AT UNITY POWER FACTOR)

LOAD TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	<u>90</u>	<u>50.4</u>	<u>400</u>	<u>42</u>	<u>28.8</u>	<u>-</u>	<u>-</u>	<u>4.8</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>400</u>	<u>51</u>	<u>35.2</u>	<u>83</u>	<u>-</u>	<u>3.8</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M)

75

(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	<u>Sea Level</u>	FUEL SPEC	<u>BS2869A2</u>
BAROMETRIC PRESSURE (kpa)	<u>101.7</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>14</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>88</u>	LUB OIL SPEC	<u>Multigrade</u>

### WIRING DIAGRAMS:

ENGINE	<u>06-130700</u>	CONTROL PANEL(S)	<u>10-170300</u>
			<u>10-173300</u>

TESTED BY

I. JOHNSON

DATE 21/09/2010