

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER:

E9671/1

CE:

NO

RATED OUTPUT	KVA	<u>40</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>32</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>415/240</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>56</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>DKS1435</u>
ENGINE MODEL	<u>1103A-33TG1</u>	SERIAL NUMBER	<u>U74295U</u>
ALTERNATOR MAKE	<u>SPAMFORD</u>		
ALTERNATOR MODEL	<u>P244J</u>	SERIAL NUMBER	<u>B10A258039</u>
CONTROL PANEL(S)	<u>AUTOSTART</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>415</u>	<u>40</u>	<u>28.8</u>	<u>-</u>	<u>-</u>	<u>4.8</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>415</u>	<u>49</u>	<u>35.2</u>	<u>83</u>	<u>-</u>	<u>4.5</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>101.5</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>17</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>77</u>	LUB OIL SPEC	<u>Multigrade</u>

WIRING DIAGRAMS:

ENGINE	<u>06-137100</u>	CONTROL PANEL(S)	<u>10-173300</u> <u>10-170300</u>
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TESTED BY

I. JOHNSON

DATE 28/07/2010

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

PLANT NUMBER:

E9671/2

CE:

NO

RATED OUTPUT	KVA	<u>40</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>32</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>415/240</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>56</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>DKS1435</u>
ENGINE MODEL	<u>1103A-33TG1</u>	SERIAL NUMBER	<u>U242197U</u>
ALTERNATOR MAKE	<u>STAMFORD</u>		
ALTERNATOR MODEL	<u>P2 445</u>	SERIAL NUMBER	<u>B10A258038</u>
CONTROL PANEL(S)	<u>AUDISSANA</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>50.3</u>	<u>415</u>	<u>40</u>	<u>28.8</u>	<u>-</u>	<u>-</u>	<u>4.6</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>415</u>	<u>49</u>	<u>35.2</u>	<u>82</u>	<u>-</u>	<u>4.1</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP
7S

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M)

(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>101.5</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>19</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>64</u>	LUB OIL SPEC	<u>Multigrade</u>

WIRING DIAGRAMS:

ENGINE	<u>06-137100</u>	CONTROL PANEL(S)	<u>10-173300</u> <u>10-170300</u>
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TESTED BY

I. JOHNSON

DATE

28/07/2010

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

PLANT NUMBER:

E9671/3

CE:

NO

RATED OUTPUT	KVA	<u>40</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>32</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>415/240</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>56</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>U242201U</u>
ALTERNATOR MAKE	<u>SPAMFORD</u>		
ALTERNATOR MODEL	<u>PA 445</u>	SERIAL NUMBER	<u>B10A258048</u>
CONTROL PANEL(S)	<u>AVD550A</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>415</u>	<u>40</u>	<u>28.8</u>	<u>-</u>	<u>-</u>	<u>4.7</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>415</u>	<u>49</u>	<u>35.2</u>	<u>83</u>	<u>-</u>	<u>4.1</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP
7S

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M)

(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>101.5</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>19</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>64</u>	LUB OIL SPEC	<u>Multigrade</u>

WIRING DIAGRAMS:

ENGINE	<u>06-137100</u>	CONTROL PANEL(S)	<u>10-173300</u> <u>10-170300</u>
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TESTED BY

I. JOHNSON

DATE 28/07/2010

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

PLANT NUMBER:

E9671/4

CE:

NO

RATED OUTPUT	KVA	<u>40</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>32</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>415/240</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>56</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>U242206U</u>
ALTERNATOR MAKE	<u>STAMFORD</u>		
ALTERNATOR MODEL	<u>P2445</u>	SERIAL NUMBER	<u>B10C766684</u>
CONTROL PANEL(S)	<u>ANDSTANA</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>415</u>	<u>40</u>	<u>28.8</u>	<u>-</u>	<u>-</u>	<u>5.0</u>
standby/prime+10%	<u>110%</u>	<u>50.0</u>	<u>415</u>	<u>49</u>	<u>35.2</u>	<u>82</u>	<u>-</u>	<u>4.4</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>101.5</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>19</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>64</u>	LUB OIL SPEC	<u>Multigrade</u>

WIRING DIAGRAMS:

ENGINE	<u>06-137100</u>	CONTROL PANEL(S)	<u>10-173300</u>
			<u>10-170300</u>

TESTED BY

I. JOHNSON

DATE

28/07/2010