

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

PLANT NUMBER:

E9897/1

CE:

No

RATED OUTPUT	KVA	<u>60</u>	RATING CLASSIFICATION	<u>DRP</u>			
	KW	<u>48</u>					
	PHASE	<u>3</u>					
	VOLTS	<u>415/240</u>			PERFORMANCE CLASS	<u>G1</u>	
	AMPS	<u>84</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>Dks1426</u>
ENGINE MODEL	<u>1103A-33TG2</u>	SERIAL NUMBER	<u>U2478564</u>
ALTERNATOR MAKE	<u>Mecc Alte</u>	SERIAL NUMBER	<u>0001391404</u>
ALTERNATOR MODEL	<u>ECO 32-2L/4</u>	SERIAL NUMBER(S)	
CONTROL PANEL(S)	<u>Manual</u>	SERIAL NUMBER(S)	
SWITCHGEAR		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>85%</u>	<u>50.8</u>	<u>415</u>	<u>57</u>	<u>41</u>	<u>-</u>	<u>-</u>	<u>5.4</u>
standby/prime+10%	<u>110%</u>	<u>50.0</u>	<u>415</u>	<u>74</u>	<u>53</u>	<u>84</u>	<u>-</u>	<u>4.4</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP

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>99.8</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>06-130700</u>	CONTROL PANEL(S)	<u>10-170800</u>
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TESTED BY

H. W. L.

DATE 04/10/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9897/2 CE: No

RATED OUTPUT	KVA	60	RATING CLASSIFICATION	DRP			
	KW	48					
	PHASE	3					
	VOLTS	415/240			PERFORMANCE CLASS	G1	
	AMPS	84					(AS DEFINED BY ISO 8528-1)
	HZ	50					
	RPM	1500					
GOVERNOR TYPE			Mechanical				
COOLING METHOD			WATERCOOLED				

ENGINE MAKE	Perkins	BUILD NUMBER	DKS1436
ENGINE MODEL	1103A-23TG2	SERIAL NUMBER	U247866U
ALTERNATOR MAKE	Mecc Alte	SERIAL NUMBER	0001391403
ALTERNATOR MODEL	ECO 32-2L/4	SERIAL NUMBER(S)	
CONTROL PANEL(S)	Manual	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

LOAD TEST RESULTS (AT UNITY POWER FACTOR)								
TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	85%	50.7	415	57	41	—	—	5.1
standby/prime+10%	110%	50.0	415	74	53	83	—	4.4

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP

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)	Sea Level	FUEL SPEC	BS2869A2
BAROMETRIC PRESSURE (kpa)	99.7	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	17	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	77	LUB OIL SPEC	Multigrade

WIRING DIAGRAMS:	
ENGINE 06-130700	CONTROL PANEL(S) 10-170800

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DATE 04/10/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9897/3 CE: No

RATED OUTPUT	KVA	60	RATING CLASSIFICATION	PRP	
	KW	48			
	PHASE	3			
	VOLTS	415/240		PERFORMANCE CLASS	G1 <small>(AS DEFINED BY ISO 8528-1)</small>
	AMPS	84			
	HZ	50			
	RPM	1500			
GOVERNOR TYPE	Mechanical		COOLING METHOD	WATERCOOLED	

ENGINE MAKE	Perkins	BUILD NUMBER	DKS1426
ENGINE MODEL	1103A-23TG2	SERIAL NUMBER	U247868U
ALTERNATOR MAKE	Mecc Alte	SERIAL NUMBER	0001439327
ALTERNATOR MODEL	ECO 32-2L/4	SERIAL NUMBER(S)	
CONTROL PANEL(S)	Manual	SERIAL NUMBER(S)	
SWITCHGEAR		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	85%	50.9	415	57	41	—	—	4.9
standby/ prime+10%	110%	50.0	415	74	53	84	—	4.2

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M)

(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO 8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	Sea Level	FUEL SPEC	BS2869A2
BAROMETRIC PRESSURE (kpa)	99.7	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	17	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	77	LUB OIL SPEC	Multigrade

WIRING DIAGRAMS:	
ENGINE 06-130700	CONTROL PANEL(S) 10-170800

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Generating Set Functional Test Report

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PLANT NUMBER:

E9897/4

CE:

No

RATED OUTPUT	KVA	<u>60</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>48</u>		PERFORMANCE CLASS	<u>G1</u>
	PHASE	<u>3</u>			(AS DEFINED BY ISO 8528-1)
	VOLTS	<u>415/240</u>			
	AMPS	<u>84</u>			
	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>Dks1426</u>
ENGINE MODEL	<u>1103A-23TG2</u>	SERIAL NUMBER	<u>U2478824</u>
ALTERNATOR MAKE	<u>Mecc Alte</u>	SERIAL NUMBER	<u>0001439378</u>
ALTERNATOR MODEL	<u>ECO 32-2L/4</u>	SERIAL NUMBER(S)	
CONTROL PANEL(S)	<u>Manual</u>	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

LOAD TEST RESULTS (AT UNITY POWER FACTOR)

TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	<u>85%</u>	<u>50.6</u>	<u>415</u>	<u>57</u>	<u>41</u>	<u>-</u>	<u>-</u>	<u>5.8</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>415</u>	<u>74</u>	<u>53</u>	<u>84</u>	<u>-</u>	<u>4.0</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP

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>99.7</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>18</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>73</u>	LUB OIL SPEC	<u>Multigrade</u>

WIRING DIAGRAMS:

ENGINE	<u>06-130700</u>	CONTROL PANEL(S)	<u>10-170800</u>
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H. W. L.

DATE 04/10/2010