

# Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E 8753/1 CE: NO

RATED OUTPUT	KVA	31	RATING CLASSIFICATION	<b>EISD</b>
	KW	24.8		
	PHASE	3		
	VOLTS	415		
	AMPS	43		
	HZ	50		
	RPM	1500		
GOVERNOR TYPE		PERFORMANCE CLASS	61	
		(AS DEFINED BY ISO 8528-1)		
		COOLING METHOD	WATERCOOLED	

ENGINE MAKE	PERKINS	BUILD NUMBER	D351434
ENGINE MODEL	1103A-336	SERIAL NUMBER	U243340U
ALTERNATOR MAKE	STAMFORD	SERIAL NUMBER	0267422/038
ALTERNATOR MODEL	P1446	SERIAL NUMBER(S)	
CONTROL PANEL(S)	AUTO-START	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	90	50.5	415	30.9	22.3	—	—	4.6
standby/prime 100%	100%	50	415	34.4	24.8	82	—	4.5

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)	1012	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	18	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	60	LUB OIL SPEC	Multigrade

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

TESTED BY *L. Zammit*

DATE *25/08/2010*

# Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER:

E 8753/2

CE:

NO

RATED OUTPUT	KVA	<u>31</u>	RATING CLASSIFICATION	<u>ESP</u>	
	KW	<u>24,8</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>415</u>		PERFORMANCE CLASS	<u>61</u>
	AMPS	<u>43</u>		(AS DEFINED BY ISO 8528-1)	
	HZ	<u>50</u>			
	RPM	<u>1500</u>			
GOVERNOR TYPE			COOLING METHOD	<u>WATERCOOLED</u>	

ENGINE MAKE	<u>PERKINS</u>	BUILD NUMBER	<u>D357434</u>
ENGINE MODEL	<u>MO3A-336</u>	SERIAL NUMBER	<u>U2430760</u>
ALTERNATOR MAKE	<u>STAMFORD</u>		
ALTERNATOR MODEL	<u>D 144 G</u>	SERIAL NUMBER	<u>0267422/P45</u>
CONTROL PANEL(S)	<u>AUTO-START</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>30</u>	<u>50,3</u>	<u>415</u>	<u>30,9</u>	<u>22,3</u>	<u>—</u>	<u>—</u>	<u>4,6</u>
standby/ <del>prime</del> 10%	<u>100%</u>	<u>50</u>	<u>415</u>	<u>34,4</u>	<u>24,8</u>	<u>83</u>	<u>—</u>	<u>5,4</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M)

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(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>1012</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>18</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>60</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

L. Zammit

DATE

25/08/2010

# Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E8753/3 CE: NO

RATED OUTPUT	KVA	34	RATING CLASSIFICATION	ESP	
	KW	24.8			
	PHASE	3			
	VOLTS	415		PERFORMANCE CLASS	G1
	AMPS	43			(AS DEFINED BY ISO 8528-1)
	HZ	50			
	RPM	1500			
GOVERNOR TYPE			COOLING METHOD	WATERCOOLED	

ENGINE MAKE	PERKINS	BUILD NUMBER	D351434
ENGINE MODEL	1103A-33G	SERIAL NUMBER	U243327U
ALTERNATOR MAKE	STAMFORD	SERIAL NUMBER	0267422/037
ALTERNATOR MODEL	P144G	SERIAL NUMBER(S)	
CONTROL PANEL(S)	AUTO-START	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	80	50.2	415	30.9	22.3	—	—	4.7
standby/ prime 10%	100%	50	415	34.4	24.8	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)	1012	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	18	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	60	LUB OIL SPEC	Multigrade

### WIRING DIAGRAMS:

ENGINE	06-130700	CONTROL PANEL(S)	10-170800
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TESTED BY

*L. Zammit*

DATE

25/08/2010

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

PLANT NUMBER:

**E9753/4**

CE:

**NO**

RATED OUTPUT	KVA	<b>31</b>	RATING CLASSIFICATION	<b>ESP</b>	
	KW	<b>24,8</b>			
	PHASE	<b>3</b>			
	VOLTS	<b>415</b>		PERFORMANCE CLASS	<b>61</b>
	AMPS	<b>43</b>		(AS DEFINED BY ISO 8528-1)	
	HZ	<b>50</b>			
	RPM	<b>1500</b>			
GOVERNOR TYPE			COOLING METHOD	<b>WATERCOOLED</b>	

ENGINE MAKE	<b>PERKINS</b>	BUILD NUMBER	<b>DJ51434</b>
ENGINE MODEL	<b>1403A-336</b>	SERIAL NUMBER	<b>U243077U</b>
ALTERNATOR MAKE	<b>STAMFORD</b>	SERIAL NUMBER	<b>0267424/025</b>
ALTERNATOR MODEL	<b>P144G</b>	SERIAL NUMBER(S)	
CONTROL PANEL(S)	<b>AUTO-START</b>	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	<b>90</b>	<b>50,7</b>	<b>415</b>	<b>30,9</b>	<b>22,3</b>	<b>—</b>	<b>—</b>	<b>4,5</b>
standby/ prime+10%	<b>100%</b>	<b>50</b>	<b>415</b>	<b>34,4</b>	<b>24,8</b>	<b>82</b>	<b>—</b>	<b>4,4</b>

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)	<b>Sea Level</b>	FUEL SPEC	<b>BS2869A2</b>
BAROMETRIC PRESSURE (kpa)	<b>1008</b>	DENSITY	<b>0.84 kg/l</b>
TEMPERATURE (Deg c)	<b>14</b>	CALORIFIC VALUE	<b>42.5 MJ/kg</b>
HUMIDITY (%)	<b>88</b>	LUB OIL SPEC	<b>Multigrade</b>

**WIRING DIAGRAMS:**

ENGINE	<b>06-130700</b>	CONTROL PANEL(S)	<b>10-170800</b>
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TESTED BY

**L. Zambrini**

DATE

**26/08/2010**

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

PLANT NUMBER: E875315 CE: NO

RATED OUTPUT	KVA	<u>31</u>	RATING CLASSIFICATION	<u>ESP</u>	
	KW	<u>24,8</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>415</u>		PERFORMANCE CLASS	<u>61</u>
	AMPS	<u>43</u>		(AS DEFINED BY ISO 8528-1)	
	HZ	<u>50</u>			
	RPM	<u>1500</u>			
GOVERNOR TYPE			COOLING METHOD	<u>WATERCOOLED</u>	

ENGINE MAKE	<u>PERKINS</u>	BUILD NUMBER	<u>12551434</u>
ENGINE MODEL	<u>1103A-336</u>	SERIAL NUMBER	<u>U243084U</u>
ALTERNATOR MAKE	<u>STAMFORD</u>		
ALTERNATOR MODEL	<u>D 144G</u>	SERIAL NUMBER	<u>0267422/047</u>
CONTROL PANEL(S)	<u>AUTO START</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>90</u>	<u>50,5</u>	<u>415</u>	<u>30,8</u>	<u>22,3</u>	<u>—</u>	<u>—</u>	<u>4,7</u>
standby/ prime 10%	<u>100%</u>	<u>50</u>	<u>415</u>	<u>34,4</u>	<u>24,8</u>	<u>82</u>	<u>—</u>	<u>4,6</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>1009</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 - 130800</u>	CONTROL PANEL(S)	<u>10 - 170800</u>
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TESTED BY

L. Zamirouli

DATE

26/08/2010