

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

PLANT NUMBER: E9892/1 CE: No

RATED OUTPUT	KVA	<u>65</u>	RATING CLASSIFICATION	<u>PRP</u>			
	KW	<u>52</u>					
	PHASE	<u>3</u>					
	VOLTS	<u>400/230</u>			PERFORMANCE CLASS	<u>G1</u>	
	AMPS	<u>94</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>RS51276</u>
ENGINE MODEL	<u>1104A-44TG1</u>	SERIAL NUMBER	<u>U513132U</u>
ALTERNATOR MAKE	<u>Mecc Alte</u>	SERIAL NUMBER	<u>0001444135</u>
ALTERNATOR MODEL	<u>ECO 32-3L/4</u>	SERIAL NUMBER(S)	
CONTROL PANEL(S)	<u>Autostart</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>100%</u>	<u>50.5</u>	<u>400</u>	<u>75</u>	<u>52</u>	<u>-</u>	<u>-</u>	<u>6.1</u>
standby/prime+10%	<u>110%</u>	<u>50.0</u>	<u>400</u>	<u>83</u>	<u>57</u>	<u>84</u>	<u>-</u>	<u>4.3</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>101.9</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>10</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>71</u>	LUB OIL SPEC	<u>Multigrade</u>

**WIRING DIAGRAMS:**

ENGINE	<u>06-130700</u>	CONTROL PANEL(S)	<u>10-170300</u>
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TESTED BY H. Wal

DATE 21/10/2010

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

PLANT NUMBER: E9892/2 CE: No

RATED OUTPUT	KVA	<u>65</u>	RATING CLASSIFICATION	<u>PRP</u>
	KW	<u>52</u>		
	PHASE	<u>3</u>	PERFORMANCE CLASS	<u>G1</u>
	VOLTS	<u>400/230</u>		
	AMPS	<u>94</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>R551276</u>
ENGINE MODEL	<u>1106A-66T61</u>	SERIAL NUMBER	<u>U513117U</u>
ALTERNATOR MAKE	<u>Mecc Alte</u>		
ALTERNATOR MODEL	<u>ECO 32-3L/4</u>	SERIAL NUMBER	<u>0001444134</u>
CONTROL PANEL(S)	<u>Autostart</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>100%</u>	<u>50.4</u>	<u>400</u>	<u>75</u>	<u>52</u>	<u>-</u>	<u>-</u>	<u>6.0</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>400</u>	<u>83</u>	<u>57</u>	<u>84</u>	<u>-</u>	<u>4.2</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>101.8</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>11</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>71</u>	LUB OIL SPEC	<u>Multigrade</u>

**WIRING DIAGRAMS:**

ENGINE	<u>06-130700</u>	CONTROL PANEL(S)	<u>10-170300</u>
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TESTED BY: H. Wal

DATE 21/10/2010

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

PLANT NUMBER: E9892/3 CE: No

RATED OUTPUT	KVA	<u>65</u>	RATING CLASSIFICATION	<u>PRP</u>		
	KW	<u>52</u>				
	PHASE	<u>3</u>				
	VOLTS	<u>400/230</u>			PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>94</u>				
	HZ	<u>50</u>				
	RPM	<u>1500</u>	(AS DEFINED BY ISO 8528-1)			
GOVERNOR TYPE	<u>Mechanical</u>		COOLING METHOD	<u>WATERCOOLED</u>		

ENGINE MAKE	<u>Perkins</u>	BUILD NUMBER	<u>R351276</u>
ENGINE MODEL	<u>1104 A-44TG1</u>	SERIAL NUMBER	<u>U512725U</u>
ALTERNATOR MAKE	<u>Mecc Alte</u>		
ALTERNATOR MODEL	<u>ECO 32-3L/4</u>	SERIAL NUMBER	<u>0001444136</u>
CONTROL PANEL(S)	<u>Autostart</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>100%</u>	<u>50.4</u>	<u>400</u>	<u>75</u>	<u>52</u>	<u>-</u>	<u>-</u>	<u>5.8</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>400</u>	<u>83</u>	<u>57</u>	<u>85</u>	<u>-</u>	<u>4.3</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>101.8</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>11</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>67</u>	LUB OIL SPEC	<u>Multigrade</u>

**WIRING DIAGRAMS:**

ENGINE	<u>66-130700</u>	CONTROL PANEL(S)	<u>10-170300</u>

TESTED BY

*H. Wal*

DATE 21/10/2010

## Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9892/4 CE: No

RATED OUTPUT	KVA	65	RATING CLASSIFICATION	PRP
	KW	52		
	PHASE	3		
	VOLTS	400/230		
	AMPS	94		
	HZ	50	PERFORMANCE CLASS	G1
	RPM	1500		
	GOVERNOR TYPE			
			COOLING METHOD	WATERCOOLED

ENGINE MAKE	Perkins	BUILD NUMBER	R351276
ENGINE MODEL	1104A-44TG1	SERIAL NUMBER	U512709U
ALTERNATOR MAKE	Mecc Alte	SERIAL NUMBER	0001444137
ALTERNATOR MODEL	ECO 32-3L/4	SERIAL NUMBER(S)	
CONTROL PANEL(S)	Autostart	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	100%	50.3	400	75	52	-	-	6.6
standby/prime+10%	110%	50.0	400	83	57	83	-	4.8

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)	101.8	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	12	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	62	LUB OIL SPEC	Multigrade

WIRING DIAGRAMS:	
ENGINE <span style="border: 1px solid black; padding: 2px;">06-130700</span>	CONTROL PANEL(S) <span style="border: 1px solid black; padding: 2px;">10-170300</span>

TESTED BY

DATE 21/10/2010