

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

PLANT NUMBER: E9786/1 CE: No

RATED OUTPUT	KVA	<u>30</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>24</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>400/230</u>			PERFORMANCE CLASS <u>G1</u> (AS DEFINED BY ISO 8528-1)
	AMPS	<u>43</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>DJS1434</u>
ENGINE MODEL	<u>1103A-33G</u>	SERIAL NUMBER	<u>U246239U</u>
ALTERNATOR MAKE	<u>Mecc Alte</u>		
ALTERNATOR MODEL	<u>ECO 28-VL/4</u>	SERIAL NUMBER	<u>0001436078</u>
CONTROL PANEL(S)	<u>Manual 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>50.6</u>	<u>400</u>	<u>31</u>	<u>22</u>	<u>-</u>	<u>-</u>	<u>4.7</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>400</u>	<u>38</u>	<u>26</u>	<u>83</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>101.6</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>16</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>96</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. Wal

DATE 13/09/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9786/2 CE: No

RATED OUTPUT	KVA	30	RATING CLASSIFICATION	PRP	
	KW	24			
	PHASE	3			
	VOLTS	400/230		PERFORMANCE CLASS	G1
	AMPS	43			(AS DEFINED BY ISO 8528-1)
	HZ	50			
	RPM	1500			
GOVERNOR TYPE			Mechanical	COOLING METHOD	WATERCOOLED

ENGINE MAKE	Perkins	BUILD NUMBER	DJS1434
ENGINE MODEL	1103A-33G	SERIAL NUMBER	U246244U
ALTERNATOR MAKE	Mecc Alte	SERIAL NUMBER	0001436079
ALTERNATOR MODEL	ECO 28-VL/4	SERIAL NUMBER(S)	
CONTROL PANEL(S)	Manual 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%	50.4	400	31	22	-	-	4.5
standby/ prime+10%	110%	50.0	400	38	26	83	-	4.1

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)	100.9	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	17	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	100	LUB OIL SPEC	Multigrade

WIRING DIAGRAMS:

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

H. Ward

DATE 14/09/2010

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

PLANT NUMBER: E9786/3 CE: No

RATED OUTPUT	KVA	<u>30</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>24</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>400/230</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>43</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>DJS1434</u>
ENGINE MODEL	<u>1103A-33G</u>	SERIAL NUMBER	<u>U2462064</u>
ALTERNATOR MAKE	<u>Mecc Alte</u>		
ALTERNATOR MODEL	<u>ECO 28-VL/4</u>	SERIAL NUMBER	<u>0001436080</u>
CONTROL PANEL(S)	<u>Manual 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>50.3</u>	<u>400</u>	<u>31</u>	<u>22</u>	<u>-</u>	<u>-</u>	<u>4.7</u>
standby/prime+10%	<u>110%</u>	<u>50.0</u>	<u>400</u>	<u>38</u>	<u>26</u>	<u>83</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>100.9</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>17</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>100</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. Wal

DATE 14/09/2010