

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9663/1 CE: No

RATED OUTPUT	KVA	45	RATING CLASSIFICATION	PRP	
	KW	36			
	PHASE	3			
	VOLTS	400/230		PERFORMANCE CLASS	G1
	AMPS	65			
	HZ	50			
	RPM	1500			
GOVERNOR TYPE			Mechanical	COOLING METHOD	WATERCOOLED

ENGINE MAKE	Perkins	BUILD NUMBER	DL51435
ENGINE MODEL	1103A-33TG1	SERIAL NUMBER	U242187U
ALTERNATOR MAKE	Mecc Alte		
ALTERNATOR MODEL	ECO 32-1L/4	SERIAL NUMBER	A1087851
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%	50.8	400	47	32	-	-	5.0
standby/ prime+10%	110%	50.0	400	57	40	83	-	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 ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	Sea Level	FUEL SPEC	BS2869A2
BAROMETRIC PRESSURE (kpa)	101.5	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	16	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	82	LUB OIL SPEC	Multigrade

WIRING DIAGRAMS:

ENGINE	06-137100	CONTROL PANEL(S)	Am3-986F
--------	-----------	------------------	----------

TESTED BY

H. Park

DATE 26/07/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9663/2 CE: No

RATED OUTPUT	KVA	45	RATING CLASSIFICATION	PRP	
	KW	36			
	PHASE	3			
	VOLTS	400/230		PERFORMANCE CLASS	G1
	AMPS	65			
	HZ	50			
	RPM	1500			
GOVERNOR TYPE			Mechanical	COOLING METHOD	WATERCOOLED

ENGINE MAKE	Perkins	BUILD NUMBER	D451435
ENGINE MODEL	1103A-33TG1	SERIAL NUMBER	U2421A34
ALTERNATOR MAKE	Mecc Alte		
ALTERNATOR MODEL	ECO 32-14/4	SERIAL NUMBER	A1087839
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%	51.0	400	47	32	-	-	4.5
standby/ prime+10%	110%	50.0	400	57	40	83	-	3.9

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

WIRING DIAGRAMS:

ENGINE	06-137100	CONTROL PANEL(S)	A113-9861
--------	-----------	------------------	-----------

TESTED BY

HWA

DATE 26/07/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9663/3 CE: No

RATED OUTPUT	KVA	45	RATING CLASSIFICATION	PRP	
	KW	36			
	PHASE	3			
	VOLTS	400/220		PERFORMANCE CLASS	G1
	AMPS	65			
	HZ	50			
	RPM	1500			
GOVERNOR TYPE			Mechanical	COOLING METHOD	WATERCOOLED

ENGINE MAKE	Perkins	BUILD NUMBER	D451435
ENGINE MODEL	1103A-33TG1	SERIAL NUMBER	U242182U
ALTERNATOR MAKE	Mecc Alte	SERIAL NUMBER	A1090311
ALTERNATOR MODEL	ECO 32-1L		
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	47	32	—	—	4.2
standby/ prime+10%	110%	50.0	400	57	40	83	—	3.4

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)	101.6	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	20	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	60	LUB OIL SPEC	Multigrade

WIRING DIAGRAMS:	
ENGINE 06-137100	CONTROL PANEL(S) A13-986F

TESTED BY H. D. W.

DATE 26/07/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER:

E9663/4

CE:

No

RATED OUTPUT	KVA	<u>45</u>	RATING CLASSIFICATION	<u>PRP</u>
	KW	<u>36</u>		
	PHASE	<u>3</u>		
	VOLTS	<u>400/220</u>	PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>65</u>		
	HZ	<u>50</u>		
	RPM	<u>1500</u>		
GOVERNOR TYPE			COOLING METHOD	<u>WATERCOOLED</u>

ENGINE MAKE	<u>Perkins</u>	BUILD NUMBER	<u>D451435</u>
ENGINE MODEL	<u>1103A-33TG1</u>	SERIAL NUMBER	<u>U241471U</u>
ALTERNATOR MAKE	<u>Mecc Alte</u>		
ALTERNATOR MODEL	<u>ECO 32-1L</u>	SERIAL NUMBER	<u>A1090308</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>47</u>	<u>32</u>	<u>-</u>	<u>-</u>	<u>4.3</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>400</u>	<u>57</u>	<u>40</u>	<u>84</u>	<u>-</u>	<u>3.6</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>101.5</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>21</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>53</u>	LUB OIL SPEC	<u>Multigrade</u>

WIRING DIAGRAMS:

ENGINE	<u>06-137100</u>	CONTROL PANEL(S)	<u>Am3-986F</u>

TESTED BY

H. Wall

DATE 26/07/2010