

# Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9816/1 CE: No

RATED OUTPUT	KVA	138	RATING CLASSIFICATION	PRP	
	KW	110			
	PHASE	3			
	VOLTS	380/220		PERFORMANCE CLASS	G1
	AMPS	210			
	HZ	50			
	RPM	1500			
GOVERNOR TYPE			COOLING METHOD		
Electronic			WATERCOOLED		

ENGINE MAKE	Perkins	BUILD NUMBER	YD51440
ENGINE MODEL	1006TAG	SERIAL NUMBER	U911355T
ALTERNATOR MAKE	Stamford	SERIAL NUMBER	0269527/005
ALTERNATOR MODEL	UC2274E	SERIAL NUMBER(S)	
CONTROL PANEL(S)	Manualstart	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	65%	50.0	380	109	72	—	—	5.0
standby/prime+10%	110%	50.0	380	185	121	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)	101.4	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	15	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	94	LUB OIL SPEC	Multigrade

#### WIRING DIAGRAMS:

ENGINE		CONTROL PANEL(S)	

TESTED BY *H. Wal*

DATE 11/07/2010

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

PLANT NUMBER: E9816/2 CE: No

RATED OUTPUT	KVA	<u>138</u>	RATING CLASSIFICATION	<u>PRP</u>		
	KW	<u>110</u>				
	PHASE	<u>3</u>				
	VOLTS	<u>380/220</u>				
	AMPS	<u>210</u>			PERFORMANCE CLASS	<u>G1</u>
	HZ	<u>50</u>			(AS DEFINED BY ISO 8528-1)	
	RPM	<u>1500</u>				
GOVERNOR TYPE	<u>Electronic</u>		COOLING METHOD	<u>WATERCOOLED</u>		

ENGINE MAKE	<u>Perkins</u>	BUILD NUMBER	<u>YDS1440</u>
ENGINE MODEL	<u>1006TAG</u>	SERIAL NUMBER	<u>U91178AT</u>
ALTERNATOR MAKE	<u>Stamford</u>	SERIAL NUMBER	<u>0269527/016</u>
ALTERNATOR MODEL	<u>UC1274E</u>	SERIAL NUMBER(S)	
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	OIL TEMP	OIL PRESS
						DEG C	DEG C	BAR
load acceptance	<u>65%</u>	<u>50.0</u>	<u>380</u>	<u>109</u>	<u>72</u>	<u>-</u>	<u>-</u>	<u>5.0</u>
standby/prime+10%	<u>110%</u>	<u>50.0</u>	<u>380</u>	<u>185</u>	<u>121</u>	<u>83</u>	<u>-</u>	<u>4.1</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>101.4</u>	DENSITY	<u>0.84 kg/l</u>	
TEMPERATURE (Deg c)	<u>15</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>	
HUMIDITY (%)	<u>88</u>	LUB OIL SPEC	<u>Multigrade</u>	

WIRING DIAGRAMS:	
ENGINE	CONTROL PANEL(S)

TESTED BY H. Ward

DATE 11/07/2010