

## Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9885/1 CE: NO

RATED OUTPUT	KVA	20	RATING CLASSIFICATION	PnP	
	KW	16			
	PHASE	3			
	VOLTS	380/220		PERFORMANCE CLASS	G1
	AMPS	30			
	HZ	50			
RPM	1500				
GOVERNOR TYPE			MECHANICAL	COOLING METHOD	WATERCOOLED

ENGINE MAKE	PERMINS	BUILD NUMBER	C2N65732
ENGINE MODEL	404D-22G	SERIAL NUMBER	U982896T
ALTERNATOR MAKE	SPRANFOND	SERIAL NUMBER	0258141/017
ALTERNATOR MODEL	BC2184E	SERIAL NUMBER(S)	
CONTROL PANEL(S)	AUDISMAN	SERIAL NUMBER(S)	
SWITCHGEAR	A-T-S	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	50.4	380	19.2	12.8	-	-	4.9
standby/ prime+10%	110%	50.0	380	26.4	17.6	82	-	4.6

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M) 75

(UNITS WITH ACQUSTIC 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)	101.3	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	15	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	64	LUB OIL SPEC	Multigrade

### WIRING DIAGRAMS:

ENGINE	08-152300	CONTROL PANEL(S)	10-173300 10-170300
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TESTED BY I. JOHNSON

DATE 29/09/2010

# Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: EG885/2 CE: NO

RATED OUTPUT	KVA	<u>20</u>	RATING CLASSIFICATION	<u>Prp</u>			
	KW	<u>16</u>					
	PHASE	<u>3</u>					
	VOLTS	<u>380/220</u>			PERFORMANCE CLASS	<u>G1</u>	
	AMPS	<u>30</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>PENINS</u>	BUILD NUMBER	<u>CN65732</u>
ENGINE MODEL	<u>404D-22G</u>	SERIAL NUMBER	<u>U982828T</u>
ALTERNATOR MAKE	<u>SPANFORD</u>	SERIAL NUMBER	<u>0258141/028</u>
ALTERNATOR MODEL	<u>BCR 184E</u>	SERIAL NUMBER(S)	
CONTROL PANEL(S)	<u>AUSD SPANT</u>	SERIAL NUMBER(S)	
SWITCHGEAR	<u>A-T-S</u>	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>80</u>	<u>50.5</u>	<u>380</u>	<u>19.2</u>	<u>12.8</u>	<u>-</u>	<u>-</u>	<u>5.1</u>
standby/prime+10%	<u>110%</u>	<u>50.0</u>	<u>380</u>	<u>26.4</u>	<u>17.6</u>	<u>82</u>	<u>-</u>	<u>4.5</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP  
 AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M) 75  
 (UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO 8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	<u>Sea Level</u>	FUEL SPEC	<u>BS2869A2</u>
BAROMETRIC PRESSURE (kpa)	<u>101.3</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>15</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>94</u>	LUB OIL SPEC	<u>Multigrade</u>

### WIRING DIAGRAMS:

ENGINE	<u>08-152300</u>	CONTROL PANEL(S)	<u>10-173300</u> <u>10-170300</u>
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TESTED BY I. JAMSON

DATE 29/09/2010