

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9782/10 CE: No

RATED OUTPUT	KVA	20	RATING CLASSIFICATION	PRP	
	KW	16			
	PHASE	3			
	VOLTS	415/240		PERFORMANCE CLASS	G1
	AMPS	28			(AS DEFINED BY ISO 8528-1)
	HZ	50			
	RPM	1500			
GOVERNOR TYPE	Mechanical		COOLING METHOD	WATERCOOLED	

ENGINE MAKE	Perkins	BUILD NUMBER	GN65732
ENGINE MODEL	404D-22G	SERIAL NUMBER	38576ST
ALTERNATOR MAKE	Mecc Alte	SERIAL NUMBER	0001338552
ALTERNATOR MODEL	ECO 28-11N/4	SERIAL NUMBER(S)	
CONTROL PANEL(S)	Automatic	SERIAL NUMBER(S)	
SWITCHGEAR	ATS	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%	50.5	416	18	13	—	—	5.1
standby/ prime+10%	110%	50.0	415	25	18	84	—	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)	1012	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	15	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	82	LUB OIL SPEC	Multigrade

WIRING DIAGRAMS:			
ENGINE	08-152300	CONTROL PANEL(S)	10-170300
			10-173300

TESTED BY
L. Taniloumba

DATE *06/08/2010*

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER:

E9782/11

CE:

No

RATED OUTPUT	KVA	<u>20</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>16</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>415/240</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>28</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>G N65732</u>
ENGINE MODEL	<u>404D-22G</u>	SERIAL NUMBER	<u>888835T</u>
ALTERNATOR MAKE	<u>Mecc Alte</u>		
ALTERNATOR MODEL	<u>ECO 28-11N/4</u>	SERIAL NUMBER	<u>0001338503</u>
CONTROL PANEL(S)	<u>Automatic</u>	SERIAL NUMBER(S)	
SWITCHGEAR	<u>ATS</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>50.8</u>	<u>415</u>	<u>18</u>	<u>13</u>	<u>-</u>	<u>-</u>	<u>5.1</u>
standby/ prime+10%	<u>110%</u>	<u>50.0</u>	<u>415</u>	<u>25</u>	<u>18</u>	<u>83</u>	<u>-</u>	<u>4.4</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>1012</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>16</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>77</u>	LUB OIL SPEC	<u>Multigrade</u>

WIRING DIAGRAMS:

ENGINE	<u>08-152300</u>	CONTROL PANEL(S)	<u>10-170300</u>
			<u>10-173300</u>

TESTED BY

Co Zambelli

DATE

06/08/2010

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

PLANT NUMBER: E9782/13 CE: No

RATED OUTPUT	KVA	<u>20</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>16</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>415/240</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>28</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>GN65732</u>
ENGINE MODEL	<u>404D-22G</u>	SERIAL NUMBER	<u>3888817</u>
ALTERNATOR MAKE	<u>Mecc Alte</u>		
ALTERNATOR MODEL	<u>ECO 28-14N/4</u>	SERIAL NUMBER	<u>0001338464</u>
CONTROL PANEL(S)	<u>Automatic</u>	SERIAL NUMBER(S)	
SWITCHGEAR	<u>ATS</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>50,8</u>	<u>415</u>	<u>18</u>	<u>13</u>	<u>-</u>	<u>-</u>	<u>5,1</u>
standby/prime+10%	<u>110%</u>	<u>50,0</u>	<u>415</u>	<u>25</u>	<u>18</u>	<u>84</u>	<u>-</u>	<u>4,4</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>1011</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>13</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>64</u>	LUB OIL SPEC	<u>Multigrade</u>

WIRING DIAGRAMS:

ENGINE	<u>08-157300</u>	CONTROL PANEL(S)	<u>10-170300</u>
			<u>10-173300</u>

TESTED BY

L. Zourenouli

DATE

06/08/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9782/14 CE: No

RATED OUTPUT	KVA	20	RATING CLASSIFICATION	PRP	
	KW	16			
	PHASE	3			
	VOLTS	415/240		PERFORMANCE CLASS	G1
	AMPS	28			
	HZ	50			
RPM	1500				
GOVERNOR TYPE			Mechanical	COOLING METHOD	WATERCOOLED

ENGINE MAKE	Perkins	BUILD NUMBER	G1065732
ENGINE MODEL	404D-22G	SERIAL NUMBER	2862447
ALTERNATOR MAKE	Mecc Alte	SERIAL NUMBER	0001338470
ALTERNATOR MODEL	ECO 28-1LN/4	SERIAL NUMBER(S)	
CONTROL PANEL(S)	Automatic	SERIAL NUMBER(S)	
SWITCHGEAR	ATS	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	80%	50,8	415	18	13	—	—	5,1
standby/ prime+10%	110%	50,0	415	25	18	83	—	3,8

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M)

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(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)	1010	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	20	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	60	LUB OIL SPEC	Multigrade

WIRING DIAGRAMS:

ENGINE	08-152300	CONTROL PANEL(S)	10-170300
			10-173300

TESTED BY

L. Zambelli

DATE

06/08/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER:

E9782/15

CE:

No

RATED OUTPUT	KVA	<u>20</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>16</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>415/240</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>28</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>GN65732</u>
ENGINE MODEL	<u>404D-22G</u>	SERIAL NUMBER	<u>385650T</u>
ALTERNATOR MAKE	<u>Mecc Alte</u>		
ALTERNATOR MODEL	<u>ECO 28-1LN/4</u>	SERIAL NUMBER	<u>0001338478</u>
CONTROL PANEL(S)	<u>Automatic</u>	SERIAL NUMBER(S)	
SWITCHGEAR	<u>ATS</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>50.8</u>	<u>415</u>	<u>18</u>	<u>13</u>	<u>-</u>	<u>-</u>	<u>5.7</u>
standby/prime+10%	<u>110%</u>	<u>50.0</u>	<u>415</u>	<u>25</u>	<u>18</u>	<u>83</u>	<u>-</u>	<u>3.6</u>

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AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M)

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(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>1010</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>20</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>62</u>	LUB OIL SPEC	<u>Multigrade</u>

WIRING DIAGRAMS:

ENGINE	<u>08-152300</u>	CONTROL PANEL(S)	<u>10-170300</u>
			<u>10-173300</u>

TESTED BY

L. Zoummi

DATE

06/08/2010