

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

PLANT NUMBER: E8781/1 CE: NO

| | | | | | |
|---------------|-------|-------------|-----------------------|----------------------------|-----------|
| RATED OUTPUT | KVA | <u>60</u> | RATING CLASSIFICATION | <u>PRP</u> | |
| | KW | <u>48</u> | | | |
| | PHASE | <u>3</u> | | | |
| | VOLTS | <u>400</u> | | PERFORMANCE CLASS | <u>B1</u> |
| | AMPS | <u>87</u> | | (AS DEFINED BY ISO 8528-1) | |
| | HZ | <u>50</u> | | | |
| | RPM | <u>1500</u> | | | |
| GOVERNOR TYPE | | | COOLING METHOD | <u>WATERCOOLED</u> | |

| | | | |
|------------------|--------------------|------------------|-----------------|
| ENGINE MAKE | <u>PERKINS</u> | BUILD NUMBER | <u>DK51436</u> |
| ENGINE MODEL | <u>H03A-33T62</u> | SERIAL NUMBER | <u>U245083U</u> |
| ALTERNATOR MAKE | <u>MECC-ALTE</u> | | |
| ALTERNATOR MODEL | <u>ECO 32-2L/4</u> | SERIAL NUMBER | <u>A1082758</u> |
| CONTROL PANEL(S) | <u>AUTO-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>85</u> | <u>50.7</u> | <u>400</u> | <u>588</u> | <u>40.8</u> | <u>-</u> | <u>-</u> | <u>4.6</u> |
| standby/ prime+10% | <u>110%</u> | <u>50</u> | <u>400</u> | <u>762</u> | <u>52.8</u> | <u>87</u> | <u>-</u> | <u>3.8</u> |

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP
75

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

WIRING DIAGRAMS:

| | | | |
|--------|------------------|------------------|------------------|
| ENGINE | <u>06-130700</u> | CONTROL PANEL(S) | <u>10-170300</u> |
|--------|------------------|------------------|------------------|

TESTED BY

C. Zambelli

DATE

04/08/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER:

E8781/2

CE:

NO

| | | | | | |
|---------------|-------|-------------|-----------------------|----------------------------|-----------|
| RATED OUTPUT | KVA | <u>60</u> | RATING CLASSIFICATION | <u>PRP</u> | |
| | KW | <u>48</u> | | | |
| | PHASE | <u>3</u> | | | |
| | VOLTS | <u>400</u> | | PERFORMANCE CLASS | <u>B1</u> |
| | AMPS | <u>87</u> | | (AS DEFINED BY ISO 8528-1) | |
| | HZ | <u>50</u> | | | |
| | RPM | <u>1500</u> | | | |
| GOVERNOR TYPE | | | COOLING METHOD | <u>WATERCOOLED</u> | |

| | | | |
|------------------|--------------------|------------------|-----------------|
| ENGINE MAKE | <u>PERKINS</u> | BUILD NUMBER | <u>DK514.36</u> |
| ENGINE MODEL | <u>1103A-33TG2</u> | SERIAL NUMBER | <u>0244603U</u> |
| ALTERNATOR MAKE | <u>MECC-ALTE</u> | | |
| ALTERNATOR MODEL | <u>ECO 32-2L/4</u> | SERIAL NUMBER | <u>A1092883</u> |
| CONTROL PANEL(S) | <u>AUTO-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>85</u> | <u>50.5</u> | <u>400</u> | <u>588</u> | <u>40.8</u> | <u>-</u> | <u>-</u> | <u>5.0</u> |
| standby/prime+10% | <u>110%</u> | <u>50</u> | <u>400</u> | <u>762</u> | <u>52.8</u> | <u>84</u> | <u>-</u> | <u>4.0</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 ISO8528-10)

| AMBIENT TEST CONDITIONS | | FUEL/OIL USED | |
|---------------------------|------------------|-----------------|-------------------|
| ALTITUDE (M) | <u>Sea Level</u> | FUEL SPEC | <u>BS2869A2</u> |
| BAROMETRIC PRESSURE (kpa) | <u>102.1</u> | DENSITY | <u>0.84 kg/l</u> |
| TEMPERATURE (Deg c) | <u>17</u> | CALORIFIC VALUE | <u>42.5 MJ/kg</u> |
| HUMIDITY (%) | <u>72</u> | LUB OIL SPEC | <u>Multigrade</u> |

WIRING DIAGRAMS:

| | | | |
|--------|------------------|------------------|------------------|
| ENGINE | <u>06-130700</u> | CONTROL PANEL(S) | <u>10-170300</u> |
|--------|------------------|------------------|------------------|

TESTED BY

L. Zammit

DATE

05/08/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9781/3 CE: 110

| | | | | |
|---------------|-------|------|----------------------------|-------------|
| RATED OUTPUT | KVA | 60 | RATING CLASSIFICATION | PRP |
| | KW | 48 | | |
| | PHASE | 3 | | |
| | VOLTS | 400 | | |
| | AMPS | 87 | | |
| | HZ | 50 | | |
| | RPM | 1500 | PERFORMANCE CLASS | 61 |
| | | | (AS DEFINED BY ISO 8528-1) | |
| GOVERNOR TYPE | | | COOLING METHOD | WATERCOOLED |

| | | | |
|------------------|-------------|------------------|----------|
| ENGINE MAKE | PERKINS | BUILD NUMBER | DK514.36 |
| ENGINE MODEL | 1103A-33TG2 | SERIAL NUMBER | 02443560 |
| ALTERNATOR MAKE | MECC - ALTE | | |
| ALTERNATOR MODEL | ECO.32-2L/4 | SERIAL NUMBER | A1092878 |
| CONTROL PANEL(S) | AUTO-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 | 85 | 50.5 | 400 | 588 | 40.8 | — | — | 4.8 |
| standby/prime+10% | 110% | 50 | 400 | 762 | 52.8 | 84 | — | 3.7 |

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 ISO8528-10)

| AMBIENT TEST CONDITIONS | | FUEL/OIL USED | |
|---------------------------|-----------|-----------------|------------|
| ALTITUDE (M) | Sea Level | FUEL SPEC | BS2869A2 |
| BAROMETRIC PRESSURE (kpa) | 102.2 | DENSITY | 0.84 kg/l |
| TEMPERATURE (Deg c) | 18 | CALORIFIC VALUE | 42.5 MJ/kg |
| HUMIDITY (%) | 73 | LUB OIL SPEC | Multigrade |

WIRING DIAGRAMS:

| | | | |
|--------|-----------|------------------|-----------|
| ENGINE | 06-130700 | CONTROL PANEL(S) | 10-170300 |
|--------|-----------|------------------|-----------|

TESTED BY

L. Ziemala

DATE

05/09/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E3791/4 CE: 110

| | | | | |
|---------------|-------|------|----------------------------|-------------|
| RATED OUTPUT | KVA | 60 | RATING CLASSIFICATION | PRP |
| | KW | 48 | | |
| | PHASE | 3 | | |
| | VOLTS | 400 | | |
| | AMPS | 87 | | |
| | HZ | 50 | | |
| | RPM | 1500 | PERFORMANCE CLASS | B1 |
| | | | (AS DEFINED BY ISO 8528-1) | |
| GOVERNOR TYPE | | | COOLING METHOD | WATERCOOLED |

| | | | |
|------------------|-------------|------------------|----------|
| ENGINE MAKE | PERKINS | BUILD NUMBER | DK514.36 |
| ENGINE MODEL | 403A-33T62 | SERIAL NUMBER | U2443510 |
| ALTERNATOR MAKE | MECC - ALTE | | |
| ALTERNATOR MODEL | ECO 32-2L/4 | SERIAL NUMBER | A1092880 |
| CONTROL PANEL(S) | AUTO-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 | 85 | 50.9 | 400 | 588 | 40.8 | — | — | 4.8 |
| standby/prime+10% | 110% | 50 | 400 | 762 | 52.8 | 86 | — | 3.5 |

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 ISO8528-10)

| AMBIENT TEST CONDITIONS | | FUEL/OIL USED | |
|---------------------------|-----------|-----------------|------------|
| ALTITUDE (M) | Sea Level | FUEL SPEC | BS2869A2 |
| BAROMETRIC PRESSURE (kpa) | 10.71 | DENSITY | 0.84 kg/l |
| TEMPERATURE (Deg c) | 20 | CALORIFIC VALUE | 42.5 MJ/kg |
| HUMIDITY (%) | 60 | LUB OIL SPEC | Multigrade |

WIRING DIAGRAMS:

| | | | |
|--------|-----------|------------------|-----------|
| ENGINE | 06-130700 | CONTROL PANEL(S) | 10-170300 |
|--------|-----------|------------------|-----------|

TESTED BY

L. Zambelli

DATE

06/08/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E8781/5 CE: N10

| | | | | |
|---------------|-------|------|----------------------------|-------------|
| RATED OUTPUT | KVA | 60 | RATING CLASSIFICATION | PRP |
| | KW | 48 | | |
| | PHASE | 3 | | |
| | VOLTS | 400 | | |
| | AMPS | 87 | | |
| | HZ | 50 | | |
| | RPM | 1500 | | |
| GOVERNOR TYPE | | | PERFORMANCE CLASS | B1 |
| | | | (AS DEFINED BY ISO 8528-1) | |
| | | | COOLING METHOD | WATERCOOLED |

| | | | |
|------------------|-------------|------------------|-----------|
| ENGINE MAKE | PERKINS | BUILD NUMBER | DK514.36 |
| ENGINE MODEL | 4103A-33TG2 | SERIAL NUMBER | U24.50510 |
| ALTERNATOR MAKE | MELC - ALTE | | |
| ALTERNATOR MODEL | ECO 32-2L/4 | SERIAL NUMBER | A1082.873 |
| CONTROL PANEL(S) | AUTO-START | 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 | 85 | 50.6 | 400 | 588 | 40.8 | — | — | 4.6 |
| standby/prime+10% | 110% | 50 | 400 | 762 | 52.8 | 85 | — | 3.7 |

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP
75

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) | 1021 | DENSITY | 0.84 kg/l |
| TEMPERATURE (Deg c) | 20 | CALORIFIC VALUE | 42.5 MJ/kg |
| HUMIDITY (%) | 60 | LUB OIL SPEC | Multigrade |

WIRING DIAGRAMS:

| | | | |
|--------|-----------|------------------|-----------|
| ENGINE | 06-130700 | CONTROL PANEL(S) | 10-170300 |
|--------|-----------|------------------|-----------|

TESTED BY

L. Team MUI

DATE

05/08/2010

Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E8781/6 CE: N10

| | | | | |
|---------------|-------|------|----------------------------|-------------|
| RATED OUTPUT | KVA | 60 | RATING CLASSIFICATION | PRP |
| | KW | 48 | | |
| | PHASE | 3 | | |
| | VOLTS | 400 | | |
| | AMPS | 87 | | |
| | HZ | 50 | | |
| | RPM | 1500 | | |
| GOVERNOR TYPE | | | PERFORMANCE CLASS | B1 |
| | | | (AS DEFINED BY ISO 8528-1) | |
| | | | COOLING METHOD | WATERCOOLED |

| | | | |
|------------------|-------------|------------------|----------|
| ENGINE MAKE | PERKINS | BUILD NUMBER | DK514.36 |
| ENGINE MODEL | 4103A-33TG2 | SERIAL NUMBER | U2450800 |
| ALTERNATOR MAKE | MECC-ALTE | SERIAL NUMBER | A1032872 |
| ALTERNATOR MODEL | ECO.32-2L/4 | SERIAL NUMBER(S) | |
| CONTROL PANEL(S) | AUTO-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 | 85 | 50.6 | 400 | 588 | 40.8 | — | — | 4.9 |
| standby/prime+10% | 110% | 50 | 400 | 762 | 52.8 | 85 | — | 3.6 |

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 ISO8528-10)

| AMBIENT TEST CONDITIONS | | FUEL/OIL USED | |
|---------------------------|-----------|-----------------|------------|
| ALTITUDE (M) | Sea Level | FUEL SPEC | BS2869A2 |
| BAROMETRIC PRESSURE (kpa) | 1020 | DENSITY | 0.84 kg/l |
| TEMPERATURE (Deg c) | 24 | CALORIFIC VALUE | 42.5 MJ/kg |
| HUMIDITY (%) | 60 | LUB OIL SPEC | Multigrade |

WIRING DIAGRAMS:

| | | | |
|--------|-----------|------------------|-----------|
| ENGINE | 06-130700 | CONTROL PANEL(S) | 10-170300 |
|--------|-----------|------------------|-----------|

TESTED BY
L. J. [Signature]

DATE
05/09/2010

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

PLANT NUMBER: ES781/7 CE: NO

| | | | | | | |
|---------------|-------|----------------|-----------------------|------------|---|-----------|
| RATED OUTPUT | KVA | <u>60</u> | RATING CLASSIFICATION | <u>PRP</u> | | |
| | KW | <u>48</u> | | | | |
| | PHASE | <u>3</u> | | | | |
| | VOLTS | <u>400</u> | | | PERFORMANCE CLASS (AS DEFINED BY ISO 8528-1) | <u>B1</u> |
| | AMPS | <u>87</u> | | | | |
| | HZ | <u>50</u> | | | | |
| | RPM | <u>1500</u> | | | | |
| GOVERNOR TYPE | | COOLING METHOD | <u>WATERCOOLED</u> | | | |

| | | | |
|------------------|--------------------|------------------|-----------------|
| ENGINE MAKE | <u>PERKINS</u> | BUILD NUMBER | <u>DK514.36</u> |
| ENGINE MODEL | <u>4103A-33TG2</u> | SERIAL NUMBER | <u>02450630</u> |
| ALTERNATOR MAKE | <u>MECC-ALTE</u> | | |
| ALTERNATOR MODEL | <u>ECO 32-2L/4</u> | SERIAL NUMBER | <u>A1082758</u> |
| CONTROL PANEL(S) | <u>AUTO-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>85</u> | <u>50.7</u> | <u>400</u> | <u>588</u> | <u>40.8</u> | <u>-</u> | <u>-</u> | <u>4.7</u> |
| standby/ prime+10% | <u>110%</u> | <u>50</u> | <u>400</u> | <u>762</u> | <u>52.8</u> | | | |

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP
75

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M)

(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>1018</u> | DENSITY | <u>0.84 kg/l</u> |
| TEMPERATURE (Deg c) | <u>20</u> | CALORIFIC VALUE | <u>42.5 MJ/kg</u> |
| HUMIDITY (%) | <u>64</u> | LUB OIL SPEC | <u>Multigrade</u> |

WIRING DIAGRAMS:

| | | | |
|--------|------------------|------------------|------------------|
| ENGINE | <u>06-130700</u> | CONTROL PANEL(S) | <u>10-170300</u> |
|--------|------------------|------------------|------------------|

TESTED BY

L. Zambelli

DATE

05/09/2010