

## Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: EA787/1 CE: No

|               |       |         |                       |                   |             |
|---------------|-------|---------|-----------------------|-------------------|-------------|
| RATED OUTPUT  | KVA   | 40      | RATING CLASSIFICATION | PRP               |             |
|               | KW    | 32      |                       |                   |             |
|               | PHASE | 3       |                       |                   |             |
|               | VOLTS | 415/240 |                       | PERFORMANCE CLASS | G1          |
|               | AMPS  | 56      |                       |                   |             |
|               | HZ    | 50      |                       |                   |             |
|               | RPM   | 1500    |                       |                   |             |
| GOVERNOR TYPE |       |         | Mechanical            | COOLING METHOD    | WATERCOOLED |

|                  |              |                  |          |
|------------------|--------------|------------------|----------|
| ENGINE MAKE      | Perkins      | BUILD NUMBER     | DKS1435  |
| ENGINE MODEL     | 1103A-33TG1  | SERIAL NUMBER    | U2430484 |
| ALTERNATOR MAKE  | Mecc Alte    |                  |          |
| ALTERNATOR MODEL | ECO 32-354   | SERIAL NUMBER    | A1088008 |
| 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%    | 50.5 | 415   | 40   | 29 | -                 | -              | 4.8           |
| standby/<br>prime+10% | 110%   | 50.0 | 415   | 49   | 35 | 84                | -              | 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) | 99.9      | DENSITY         | 0.84 kg/l  |
| TEMPERATURE (Deg c)       | 16        | CALORIFIC VALUE | 42.5 MJ/kg |
| HUMIDITY (%)              | 82        | LUB OIL SPEC    | Multigrade |

### WIRING DIAGRAMS:

|        |           |                  |           |
|--------|-----------|------------------|-----------|
| ENGINE | 06-130700 | CONTROL PANEL(S) | 10-170800 |
|--------|-----------|------------------|-----------|

TESTED BY *H. Wal*

DATE 07/09/2010

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

PLANT NUMBER: E9787/2 CE: No

|               |       |                   |                       |                            |           |
|---------------|-------|-------------------|-----------------------|----------------------------|-----------|
| RATED OUTPUT  | KVA   | <u>40</u>         | RATING CLASSIFICATION | <u>PRP</u>                 |           |
|               | KW    | <u>32</u>         |                       |                            |           |
|               | PHASE | <u>3</u>          |                       |                            |           |
|               | VOLTS | <u>415/240</u>    |                       | PERFORMANCE CLASS          | <u>G1</u> |
|               | AMPS  | <u>56</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>Dk51435</u>  |
| ENGINE MODEL     | <u>1103A-33TG1</u>  | SERIAL NUMBER    | <u>U244948U</u> |
| ALTERNATOR MAKE  | <u>Macc Alte</u>    |                  |                 |
| ALTERNATOR MODEL | <u>ECO 32-354</u>   | SERIAL NUMBER    | <u>A1091580</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>50.5</u> | <u>415</u> | <u>40</u> | <u>29</u> | <u>-</u>          | <u>-</u>       | <u>4.8</u>    |
| standby/<br>prime+10% | <u>110%</u> | <u>50.0</u> | <u>415</u> | <u>49</u> | <u>35</u> | <u>84</u>         | <u>-</u>       | <u>4.0</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>100.0</u>     | DENSITY         | <u>0.84 kg/l</u>  |
| TEMPERATURE (Deg c)       | <u>18</u>        | CALORIFIC VALUE | <u>42.5 MJ/kg</u> |
| HUMIDITY (%)              | <u>68</u>        | LUB OIL SPEC    | <u>Multigrade</u> |

**WIRING DIAGRAMS:**

|        |                  |                  |                  |
|--------|------------------|------------------|------------------|
| ENGINE | <u>06-130700</u> | CONTROL PANEL(S) | <u>10-170800</u> |
|--------|------------------|------------------|------------------|

TESTED BY

H. Walsh

DATE 07/09/2010