



Image for illustrative purposes only..

# **GENERATING SET MODEL (CPZ900)**

# 1500 rpm (50 Hz Ratings)

| Gross Engine Output |          |         | Net Engine Output |          |         | Typical Generator Set Output |       |       |         |        |      |
|---------------------|----------|---------|-------------------|----------|---------|------------------------------|-------|-------|---------|--------|------|
| Standby             | Prime    | Base    | Standby           | Prime    | Base    | Standby                      | (ESP) | Prime | e (PRP) | Base ( | COP) |
| kWm/BHP             |          |         | kWm/BHP           |          |         | kWe                          | kVA   | kWe   | kVA     | kWe    | kVA  |
| 895/1200            | 806/1080 | 634/850 | 866/1161          | 786/1054 | 614/823 | 800                          | 1000  | 728   | 910     | 584    | 730  |

# **General Engine Data**

| Engine Model                | QST30-G3  |  |  |
|-----------------------------|---|--|--|
| Туре                        | 4 cycle, In line, Turbocharged and after-cooled |  |  |
| Bore mm                     | 140.0 mm (5.51 in.)                             |  |  |
| Stroke mm                   | 165.1 mm (6.5 in.)                              |  |  |
| Displacement Litre          | 30.5 litre                                      |  |  |
| Cylinder Block              | Cast iron, 50°V 12 cylinder                     |  |  |
| Battery Charging Alternator | 35 amps   |  |  |
| Starting Voltage            | 24 volt, negative ground                        |  |  |
| Fuel System                 | Direct injection                                |  |  |
| Fuel Filter                 | Spin-on fuel filters with water separator       |  |  |
| Lube Oil Filter Type(s)     | Spin-on full flow filter                        |  |  |
| Lube Oil Capacity (I)       | 40.7  |  |  |
| Flywheel Dimensions         | 0/18  |  |  |

# **Coolpac Performance Data**

| Cooling System Design                         | Jacket Water After Cooled                          |  |  |
|---|--|--|--|
| Coolant Ratio                                 | 50% ethylene glycol; 50% water                     |  |  |
| Coolant Capacity (I)                          | 114.0  |  |  |
| Limiting Ambient Temp.(°C)**                  | 51.0   |  |  |
| Fan Power (kWm)                               | 42.9   |  |  |
| Cooling System Air Flow (m <sup>3</sup> /s)** | 17.6   |  |  |
| Air Cleaner Type (Normal Duty)                | Dry replaceable element with restriction indicator |  |  |
| ** @ 13 mm H <sup>2</sup> 0 at 100% Prime     |  |  |  |

@ 13 mm H<sup>2</sup>0 at 100% Prime

# Fuel Consumption 1500 (50 Hz)

| kWm              | BHP   | L/ph   | US gal/ph   |  |  |  |
|------------------|---|--|---|--|--|--|
| Standby Power    |   |  |   |  |  |  |
| 895              | 1200  | 204  | 53.9  |  |  |  |
| Prime Power      |   |  |   |  |  |  |
| 806              | 1080  | 184  | 48.5  |  |  |  |
| 604              | 810   | 139  | 36.6  |  |  |  |
| 403              | 540   | 94.0   | 24.7  |  |  |  |
| 201              | 270   | 51.0   | 13.4  |  |  |  |
| Continuous Power |   |  |   |  |  |  |
| 634              | 850   | 146  | 38.4  |  |  |  |
|                  | kWm<br>895<br>er<br>806<br>604<br>403<br>201<br>s Power | kWm     BHP       895     1200       er     806     1080       604     810       403     540       201     270       s Power | kWm     BHP     L/ph       895     1200     204       er     806     1080     184       604     810     139       403     540     94.0       201     270     51.0       s Power     540     540 |  |  |  |

# ALTERNATOR DATA

| Make                        | Stamford              |
|-----------------------------|-----------------------|
| Model                       | HCI 634H1             |
| No. of bearings             | 1                     |
| Insulation class            | Н                     |
| Wires                       | 12                    |
| Ingress Protection          | IP23                  |
| Excitation System           | PMG                   |
| Winding Pitch               | 2/3                   |
| AVR Model                   | MX321                 |
| Overspeed                   | 2250 mn <sup>-1</sup> |
| Voltage Regulation (steady) | ± 0.5%                |

| CONTROL PANEL |             |  |  |  |
|---------------|-------------|--|--|--|
| Make          | Deep Sea    |  |  |  |
| Model         | 7000 SERIES |  |  |  |

The **DSE 7000** Series is an Auto Start Control Module for single genset applications. It includes a backlit LCD display which clearly shows the status of the engine all the times. This module can either be programmed using the front panel or by using the DSE configuration suite PC software.

# **STANDARD SPECIFICATIONS**

# **CPZ900**

### Metering and Alarm indications:

- · Generator frequency
- Underspeed, Overspeed
- Generator volts (L-L, L-N)
- Generator current
- Engine oil pressure
- Engine coolant temperature
- Fuel level (Warning or shutdown) Optional
- Hours run counter

# 1. ENGINE

Perkins four stroke heavy duty high performance industrial type diesel engine.

## 2. ENGINE FILTRATION SYSTEM

- Cartridge type dry air filter.
- Two Cartridge type fuel filters.
- Full flow lube oil filter.

All filters have replaceable elements.

# 3. COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures (consult your dealer for de-ration factors)

### 4. EXHAUST SYSTEM

Heavy duty Industrial Exhaust Silencer

Silencer noise reduction level Maximum allowable back pressure

## 5. CIRCUT BREAKER TYPE

ABB 3 pole MCCB. (4 pole is optional)

# 6. FUEL SYSTEM

The baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at Full Load. The tank is supplied complete with fill cap breather, fuel feed and return lines to the Engine and drain plug.

- · Battery volts
- · Fail to start/stop
- · Emergency stop
- · Failed to reach loading voltage/frequency
- Charge fail
- Loss of magnetic pick-up signal Optional
- · Low DC voltage
- · CAN diagnostics and CAN fail/error

# 7. ALTERNATOR

### 7.1 INSULATION SYSTEM

• The insulation system is Class H.

• All windings are impregnated in either a triple dip thermosetting liquid, oil and acid resisting polyester varnish or vacuum pressure impregnated with a special polyester resin.

• Heavy coat of antitracking varnish additional protection against moisture or condensation.

#### 7.2 AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at  $\pm 0.5\%$ . Nominal adjustment by means of a trim pot incorporated on the AVR.

### 8. MOUNTING ARRANGEMENT

#### 8.1 COUPLING

The Engine and Alternator are directly coupled by means of an SAE flange. The Engine flywheel is flexibly coupled to the Alternator rotor.

#### 8.2 ANTI-VIBRATION MOUNTING PADS

Anti-Vibration pads are affixed between the Engine / Alternator feet and the Baseframe thus ensuring complete vibration isolation of the rotating assembly.

#### 8.3 SAFETY GUARDS

The Fan & Fan Drive along with the Battery Charging Alternator are Safety Guard protected for personnel protection.

### 9. FACTORY TEST

 The Generating set is load tested before dispatch
All protective devices control functions and site load conditions are simulated. The generator and it's systems are checked before dispatch.

# **10. EQUIPMENT FINISHING**

All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

### **11. DOCUMENTATION**

Operation & Maintenance manual, Circuit wiring diagrams and Commissioning / Fault Finding instruction leaflets are accompanied with the Generator.

### **12. QUALITY STANDARDS**

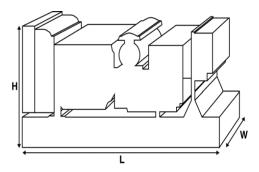
The equipment meets the following standards: BS4999, BS5000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO 8528.

## 13. WARRANTY

All of the Generating Sets are covered under a warranty policy for a period of 24 months. Warranty of the equipment is in line with manufacturers warranty terms & conditions.

(check warranty statement for more details, as it may vary for different countries)

In line with continuous product development, we reserve the right to change specifications without notice.



#### STANDARD REFERENCE CONDITIONS

#### **Rating Definitions**

**Prime Power:** Variable load. Unlimited hours usage with an average load factor of 80% of the published prime power over each 24 hour period. A 10% overload is available for 1 hour in every 12 hours of operation.

**Standby Power:** Variable load. Limited to 500 hours annual usage, up to 300 hours of which my be continuous running. No overload is permitted.