

JUBILEE GENERATOR MODEL

# JEG1500CS

1500 kVA PRIME 1200 kW 1660 kVA STANDBY 1328 kW



## **Technical Data**

v17.02

| Cummins  | CGT (Stamford) | Phase | Туре     | Model Number |
|----------|----------------|-------|----------|--------------|
| KTA50GS8 | PI734C         | Three | Enclosed | JEG1500CS    |

| RATINGS | PRIME POWER (PRP) |      | STANDBY POWER (ESP) |      | (ESP) |      |
|---------|-------------------|------|---------------------|------|-------|------|
| Voltage | kVA               | kWe  | Amps                | kVA  | kWe   | Amps |
| 380/220 | 1500              | 1200 | 2280                | 1615 | 1292  | 2455 |
| 400/230 | 1500              | 1200 | 2160                | 1660 | 1328  | 2390 |
| 415/240 | 1500              | 1200 | 2085                | 1660 | 1328  | 2307 |
| 440/254 | 1500              | 1200 | 1965                | 1630 | 1304  | 2135 |

#### **Power Definition**

**Prime Power (PRP)** is the power continuously available at variable load in lieu of mains power. An overload of 10% is permitted for one hour in every 12 hours of operation.

**Standby Power (ESP)** is the maximum output available for up to a maximum of 500 hours per year. No overload is permitted.

**Standard Conditions:** air inlet temperature of 40°C, barometric pressure of 100 kPA (110 m.a.s.l.) relative humidity of 30%. **Note:** All ratings data based on operation under ISO 8528-1 and ISO 3046-1. The above ratings may be subject to deration at different ambient temperatures or site altitude conditions.

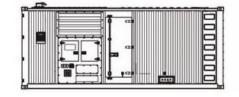


#### **Scope of Supply**

- Water cooled Cummins diesel engine at 1500rpm
- Single bearing CGT Stamford alternator
- Radiator with coolant expansion bottle
- Fully guarded engine-driven fan
- Internally Bunded Day tank
- Heavy duty rubber anti-vibration mounts
- 24V starter batteries, tray and connecting cables
- Battery charger and Battery Isolator switch
- Spin on Oil and Fuel filters and dry type Air filter
- Sump Drain Kit
- Automatic Mains Failure controller with protections
- Main line circuit breaker
- Emergency Stop buttons
- Sound attenuated container / fork slots
- Industrial silencers with rain flaps
- Factory Test Certificate and Pre-delivery service
- Operation Manual

| Typical Enclosed Generator Sound Pressure Level in Free Field Conditions |      |            |      |
|--|------|------------|------|
| dB(A) @ 1m   | 82.8 | dB(A) @ 7m | 73.5 |

| Dimensions | s and Weight |
|------------|--------------|
| Length     | (L) 6096 mm  |
| Width      | (W) 2438 mm  |
| Height     | (H) 2790 mm  |
| Dry Weight | 16500 kg     |





All specifications are subject to change without prior notice

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# ENGINE & COOLING TECHNICAL DATA CUMMINS KTA50GS8

|         | DESCRIPTION  | VALUE        | UNITS           |
|---------|--|--------------|-----------------|
|         | Engine Speed   | 1500         | rpm             |
| Ţ       | Number of Cylinders                                  | 16           | Inline          |
| ΞRA     | Aspiration   | Turbocharged | l & Aftercooled |
| GENERAL | Bore / Stroke  | 159 / 159    | mm              |
| 9       | Displacement   | 50           | litres          |
|         | Governor   | Electronic   | -               |
|         | Fuel Consumption at 110% Power                       | 345          | litres/hr       |
|         | Fuel Consumption at 100% Power                       | 289          | litres/hr       |
| EL      | Fuel Consumption at 75% Power                        | 222          | litres/hr       |
| FUEL    | Fuel Consumption at 50% Power                        | 155          | litres/hr       |
|         | Fuel Consumption at 25% Power                        | 82           | litres/hr       |
|         | Standard Fuel Tank Capacity                          | 900          | litres          |
|         | Maximum Air Intake Restriction (Clean Filter)        | 3.73         | kPa             |
| AIR     | Maximum Air Intake Restriction (Contaminated Filter) | 6.21         | kPa             |
| ,       | Engine Air Intake Flow                               | 1500         | litres/sec      |
| 15      | Exhaust Gas Flow                                     | 3845         | litres/sec      |
| EXHAUST | Exhaust Gas Temperature                              | 485          | °C              |
| XH/     | Maximum Exhaust Back Pressure                        | 6.78         | kPa             |
| Ð       | Recommended Exhaust Pipe Diameter                    | N/A          | mm              |
|         | Maximum Restriction to Cooling Air Flow              | N/A          | kPa             |
| NG      | Maximum Coolant Temperature                          | 100          | °C              |
| COOLING | Coolant Flow   | N/A          | litres/sec      |
| 00      | Coolant Capacity                                     | 174          | litres          |
|         | Thermostat Adjusting Temperature Range               | 82 - 93      | °C              |
|         | Total Oil Capacity                                   | 204          | litres          |
| OIL     | Typical Oil Pressure at Rated Speed                  | 345-483      | kPa             |
| /       | Maximum Oil Temperature in Oil Pan                   | 121          | °C              |
| ()      | Electrical System Voltage                            | 24           | V               |
| ELEC    | Battery Type   | SLA          | -               |
| ш       | Battery Capacity CCA                                 | 1280         | Α               |

## ALTERNATOR TECHNICAL DATA CGT STAMFORD PI734C

|         | DESCRIPTION           | VALUE                          |  |
|---------|-----------------------|--------------------------------|--|
|         | Operating Temperature | 40 °C                          |  |
|         | Coupling              | Direct                         |  |
|         | Number of Bearings    | Single                         |  |
| \\      | Phase / Poles         | 3 Phase / 4 Pole / Winding 312 |  |
| GENERAL | Power Factor          | Cos φ = 0.8                    |  |
| GE      | Excitation            | P.M.G.                         |  |
|         | Insulation System     | Class H                        |  |
| -       | AVR Type              | MX341                          |  |
|         | Voltage Regulation    | ± 1.0%                         |  |



#### JUBILEE CONTROL SYSTEM

#### DSE7420 AMF

The DSE7420 is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas generator set applications.

Monitoring an extensive number of engine parameters, the module displays warnings, shutdowns and engine status information on the back-lit LCD screen, illuminated LEDs, remote PC, audible alarm and via email alerts (utilising optional DSE890 3G Gateway).

The DSE7420 can monitor the mains (utility) supply and includes USB, RS232, RS485 & Ethernet ports as well as dedicated terminals for system expansion.

The module is compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offers a comprehensive number of flexible inputs, outputs and extensive engine protections so the system can be easily adapted to meet the most demanding industry requirements.



### **OPTIONAL CONTROL SYSTEMS**

| DSE8610  | AMF/ SYNCHRONISING / LOAD SHARE / SET TO SET   |
|--|--|
| ## CONTRACTOR   STATE   STATE  | The DSE8610 is an easy to use multi-generator loadshare system, designed to synchronise up to 32 generators including electronic and non-electronic engines. The DSE8610 monitors the generator and indicates operational status and fault conditions, automatically starting or stopping the engine on load demand or fault condition.  |
| DSE8620  | AMF/ SYNCHRONISING / LOAD SHARE / SET TO MAINS   |
| THE PARTITIONS IN THE PARTITION IN THE P | The DSE8620 is an Auto Mains (Utility) Failure Control Module suitable for paralleling single gensets (diesel or gas) with the mains (utility) supply. The module will automatically start the generator on detection of a mains failure, and will control the switchover from and back to the mains (utility) supply, offering an uninterrupted return. The modules synchronising functions include automatic synchronising with built-in synchroscope and closing onto dead bus. Direct and flexible outputs from the module are provided to allow connection to the most commonly used speed governors and automatic voltage regulators (AVRs).   |
| DSE890   | 3G GATEWAY   |
| DSE  | The DSEWebNet Gateway is used in conjunction with supported DSE controllers to provide monitoring and communications data via the DSEWebNet® advanced communications system. The DSEWebNet Gateway communicates to the connected DSE controller(s), monitoring the instrumentation and operating state. When this data changes, the new data is logged in the internal memory. At regular intervals the logged data is transmitted to the DSE host server. The DSE host server is then integrated into the DSEWebNet® which can be accessed via an internet connected device and web browser to allow remote monitoring and control of multiple DSE controllers around the globe. GSM, GPS and GSM/GPS antenna's are available as accessories. |
| DSE330   | BASIC AUTO TRANSFER SWITCH CONTROL MODULE  |
| DSE Doop Sea Bestrooms 200   | The DSE330 is an Automatic Transfer Switch Controller. The module will monitor the voltage and frequency of the incoming S1 AC supply and in the event of failure will issue a start command to S2.  Once S2 is available and producing an output within limits, the DSE330 will control the transfer device and switch the load from S1 to S2.  Please talk to us about our Advanced ATS range suitable for Modbus, BMS and SCADA.  |

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