

# DIESEL GENERATOR DATA SHEET

## HIPOWER DIESEL GENERATOR

Powered by Cummins

Model:PGD550C



### I . GENERAL DATA

|                     |        |                |      |
|---------------------|--------|----------------|------|
| Prime Power         | kW/kVA | 400            | 500  |
| Standby Power       | kW/kVA | 440            | 550  |
| Frequency           | Hz/rpm | 60             | 1800 |
| Voltage             | V      | 220            | 127  |
| Current             | A      | 1312           |      |
| Connection          | /      | 3P 4W/Y        |      |
| Rated Power Factor  | /      | 0.8            |      |
| Open Type (L×W×H)   | mm     | 3500×1345×2110 |      |
| Open Type(Weight)   | kg     | 4200           |      |
| Silent Type (L×W×H) | mm     | 4800×2100×2275 |      |
| Silent Type(Weight) | kg     | 5400           |      |



■ Available for voltages 400/230V, 480/277V, 380/220V, 440/254V, 416/240V, 220/127V, 208/120V

■ All datas based on ISO 3046, altitude 100m (328ft), barometric pressure 100kPa (29.53inHg), air temperature 25°C (77°F), relative humidity 30%.

■ Please contact with engineer for correct generator capacity selection when the load application can't meet with the standard reference.

■ diesel generators comply with standards :ISO8528,ISO 14000,ISO3046,GB755,BS5000,VDE0530,IEC34-1

## II. STANDARD CONFIGURATION

|                          |  |
|--------------------------|--|
| Engine                   | Cummins, including air filters, fuel filters, oil filter, starting motor and charging alternator etc.  |
| Alternator               | Stamford brushless AC alternator   |
| Radiator                 | Silent Type 50°C (Open Type 40°C) , fan protective shroud  |
| Base Frame               | ≤550KW: base mounted fuel tank, anti-vibration pads, battery holder<br>>550KW: channel steel base frame, anti-vibration pads, battery holder |
| Circuit Breaker          | >63A, ≤1250A : Molded case circuit breaker(MCCB)   |
| Control System           | DEEP SEA 7320  |
| Start Battery            | Dry charged battery, available for 6 times starts under standard condition; connection cables.   |
| Installation Accessories | Bellow, Elbow and flange, Exhaust silencer, etc.   |
| Tool                     | standard   |
| Documents                | Electric drawing, operation & maintenance manual, certification etc.   |

## III. OPTIONAL CONFIGURATION

|                            |  |
|----------------------------|--|
| Engine Accessories         | <input type="checkbox"/> Heavy-duty air filter <input type="checkbox"/> Coolant heater <input type="checkbox"/> Lub oil heater <input type="checkbox"/> Fuel and Water Separator   |
| Alternator And Accessories | <input type="checkbox"/> Stamford <input type="checkbox"/> Leroy Somer <input type="checkbox"/> Marathon <input type="checkbox"/> Anti condensation heater <input type="checkbox"/> PMG<br><input type="checkbox"/> High voltage ____ kV               |
| Cooling System             | <input type="checkbox"/> 50°C radiator <input type="checkbox"/> Heat exchanger + water cooling tower + External water circulation pumping system<br><input type="checkbox"/> Remote horizontal water tank system                                       |
| Control System             | <input type="checkbox"/> AMF <input type="checkbox"/> Parallel <input type="checkbox"/> Practical type in low temperature environment <input type="checkbox"/> Control Screen Heater<br><input type="checkbox"/> Other (Comap、DEIF)                    |
| Circuit Breaker            | <input type="checkbox"/> 3/4 poles <input type="checkbox"/> Fixed/handcart type <input type="checkbox"/> Electric mechanism  |
| Automatic Transfer Swtich  | <input type="checkbox"/> ATS cabinet   |
| Start Battery              | <input type="checkbox"/> Nickel-cadmium battery <input type="checkbox"/> Maintenance-free battery <input type="checkbox"/> Power charger and selector<br><input type="checkbox"/> Charging current meter   |
| External Fuel Tank         | <input type="checkbox"/> 500L <input type="checkbox"/> 1000L <input type="checkbox"/> 1500L <input type="checkbox"/> 2000L <input type="checkbox"/> 2500L <input type="checkbox"/> 3000L <input type="checkbox"/> 4000L <input type="checkbox"/> 5000L |
| Others                     | _____  |

## IV. ENGINE DATA

|                  |                                     |                   |         |     |
|------------------|-------------------------------------|-------------------|---------|-----|
| Engine Model     | QSZ13-G5                            | Engine Power      | 500     | kW  |
| Aspiration       | Turbocharged & Charge<br>Air Cooled | Displacement      | 13      | L   |
| Type             | In-line                             | Bore×Stroke       | 130×163 | mm  |
| No. of Cylinders | 6                                   | Compression Ratio | 17:1    |     |
| Governor Type    | HPCR                                | Rated Speed       | 1800    | RPM |

### ■ Fuel System

|                              |   |     |                                |          |
|------------------------------|---|-----|--------------------------------|----------|
| Prime Power Fuel Consumption | 102.1   | L/h | Standby Power Fuel Consumption | 116.9    |
| Fuel #                       | ASTM D975 No.2-D or<br>BS2869 1998 Class A1, A2 |     | Injection System               | L/h HPCR |

### ■ Lubrication System

|                  |                |   |                  |        |
|------------------|----------------|---|------------------|--------|
| Lub Oil Capacity | 75.33          | L |                  |        |
| Lub #            | API CF-4 15W40 |   | Max. Temperature | 121 °C |

### ■ Coolant System

|                                    |            |                     |                     |             |
|------------------------------------|------------|---------------------|---------------------|-------------|
| Coolant Capacity                   | 77.1       | L                   | Max. Top Tank Temp. | 107         |
| Std. Thermostat (Modulating) Range | °C 82 - 94 | °C                  | Fan Drive Method    | Shaft drive |
| Cooling Fan Air Flow               | 828        | m <sup>3</sup> /min |                     |             |

### ■ Air Intake System

|                     |           |                     |                                |     |     |
|---------------------|-----------|---------------------|--------------------------------|-----|-----|
| Combustion Air Flow | 34.9/35.5 | m <sup>3</sup> /min | Maximum Air Intake Restriction | 3.2 | kPa |
|---------------------|-----------|---------------------|--------------------------------|-----|-----|

### ■ Exhaust System

|                  |           |        |                    |      |     |
|------------------|-----------|--------|--------------------|------|-----|
| Exhaust Gas Flow | 42.6/43.5 | kg/min | Max. Back Pressure | 13   | kPa |
| Exhaust Gas Temp | ≤476      | °C     | Exhaust Pipe Size  | φ130 | mm  |

### ■ Starting System

|            |                      |         |       |    |
|------------|----------------------|---------|-------|----|
| Start Mode | DC24V Electric start | Battery | 2×150 | Ah |
|------------|----------------------|---------|-------|----|

## V. ALTERNATOR DATA

|                      |          |                    |              |        |
|----------------------|----------|--------------------|--------------|--------|
| Alternator Model     | HCI544C  | Standby - 150/40°C | 465/581      | kW/kVA |
| PF.                  | 0.8      | Voltage            | 220/127      | V      |
| Phase                | 3        | Frequency          | 60           | Hz     |
| Connection           | 3P 4W/Y  | Bearing            | 1            |        |
| Winding Pitch        | 2/3      | Protection Class   | IP23         |        |
| Insulation Class     | H        | Efficiency         | 94.5%        |        |
| Tel. Influence       | TIF: <50 | Voltage Regulation | ±1%          |        |
| Harmonic Coefficient | THF: <2% | AVR                | AS440        |        |
| Voltage Adjust Scope | ±5%      | Excitation System  | Self-excited |        |

## VI. CONTROL SYSTEM DATA

**MODEL DSE7320**

### ■ Main feature

Electronic J1939 (CAN) and nonelectronic MPU and alternator sensing engine support for diesel, gas and petrol engines all in one variant.

The DSE7320 will also monitor the mains (utility) supply.

### ■ Key Function

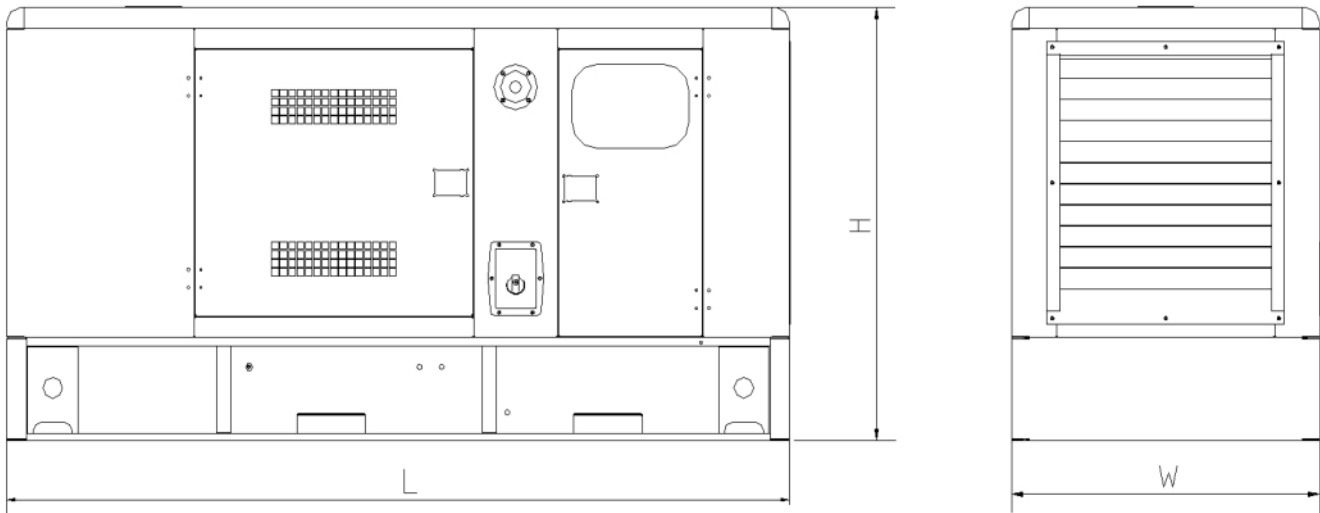
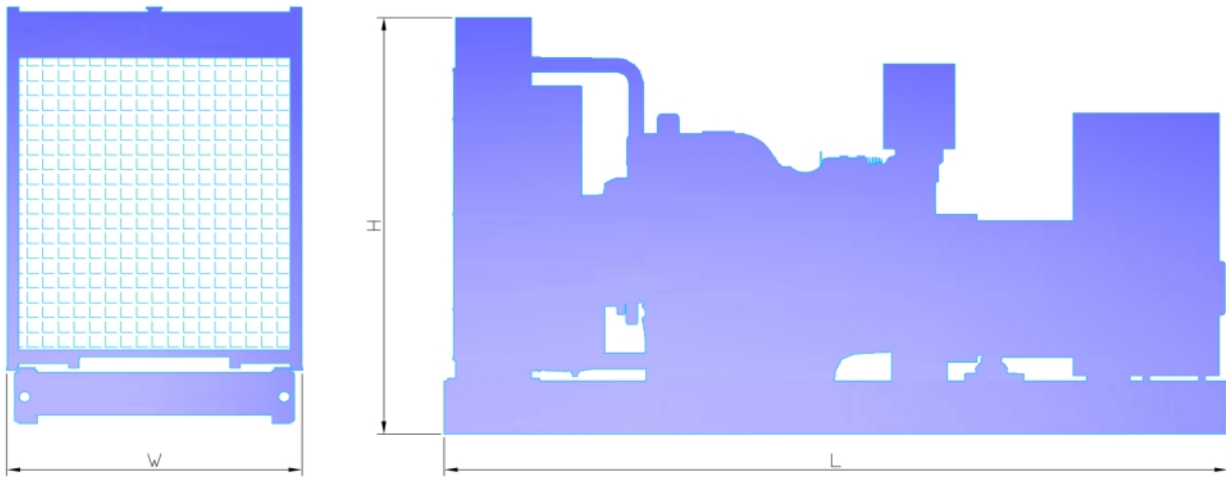


- |   |   |
|---|---|
| ▲ 4-Line back-lit LCD text display  | ▲ Charge alternator failure alarm                       |
| ▲ Five key menu navigation  | ▲ Manual speed ctrl (on compatible CAN engines)         |
| ▲ Front panel editing with PIN protection   | ▲ CAN and Magnetic Pick-up/Alt sensing                  |
| ▲ Power save mode Customisable status screens   | ▲ Overload protection                                   |
| ▲ Support for up to three remote  | ▲ Reverse power (kW & kV Ar) protection                 |
| ▲ 9 configurable inputs   | ▲ LED and LCD alarm indication                          |
| ▲ Display units   | ▲ Power monitoring (kW h, kV Ar, kV A h, kV Ar h)       |
| ▲ Flexible sender inputs  | ▲ Load switching (load shedding and dummy load outputs) |
| ▲ Configurable timers and alarms  | ▲ Automatic load transfer                               |
| ▲ 3 configurable maintenance alarms   | ▲ Unbalanced load protection                            |
| ▲ Multiple date and time scheduler  | ▲ Independent Earth Fault trip                          |
| ▲ Configurable event log (250)  | ▲ USB connectivity                                      |
| ▲ Integral PLC editor   | ☆ <u>For more information, please visit the</u>         |
| ▲ Easy access diagnostic page   | <u>official website</u>                                 |
| ▲ Tier 4 CAN engine support   |   |
| ▲ Compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines |   |

## VII. WARRANTY POLICY

1. Guarantee for one year or 1000 hours (accord to whichever reach first) from ex-factory date. Refer to « Diesel Generator Warranty Manual » for more details.
2. Wearing parts( filters), incorrect man-made operation, maintenance failures are excluded from the warranty policy

## VIII. DRAWING (for illustration purposes only)



**Intertek**

Cumple con UL STD 2200 Certificado para  
 CSA STD C22.2 # 100 Certificado para  
 CSA STD C22.2 # 14

