

## Diesel Generator Set RCS1250



Photos reference only

### Advantages

- ✓ High quality, reliable and complete power unit
- ✓ Compact design
- ✓ Easy start and maintenance possibility
- ✓ Every generating set is subject to a comprehensive test program which includes 50%, 75%, 100%, 110% load testing, checking and provision of all control and safety shut down functions testing
- ✓ The 24V high performance maintenance-free lead-acid starting battery including Rack and Cables
- ✓ Industrial capacity exhaust silencer and flexible exhaust hose
- ✓ With HUATONG Circuit Breaker
- ✓ Packing: be secured with polythene dust cover

### Genset Technical Data

|                               |                |
|-------------------------------|----------------|
| Prime power                   | 1250kVA/1000kW |
| Standby power                 | 1375kVA/1100kW |
| Rated speed                   | 1500 RPM       |
| Output frequency              | 50 Hz          |
| Phase                         | 3              |
| Rated voltage                 | 400 V          |
| Engine model(Cummins)         | KTA50-G3       |
| Alternator model(Stamford)    | LVI 634G       |
| Fuel consumption of 100% load | 254 L/h        |
| Fuel consumption of 75% load  | 191 L/h        |
| Voltage regulation rate       | ≤±1%           |

#### Prime Power

This rating is for the supply of continuous electrical power (at variable load). There is no limit on the annual hours of operation and 10% overload power can be supplied for 1 hour in 12.

#### Standby power

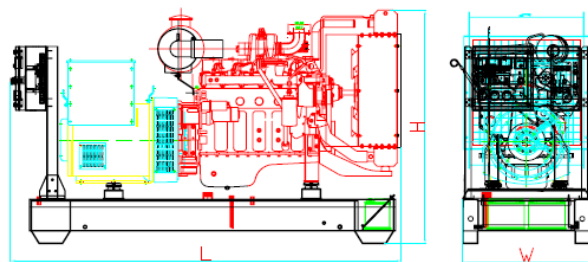
This rating is for the supply of continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted.

#### Rated voltage

Subject to customer requirement

### Dimension and Weight

|               |    |      |
|---------------|----|------|
| Length (L)    | mm | 4960 |
| Width (W)     | mm | 2060 |
| Height (H)    | mm | 2400 |
| Weight        | kg | 8800 |
| Tank capacity | L  | N/A  |



### Chassis

- ✓ The complete gen-set is mounted as whole on a heavy-duty fabricated, steel base frame
- ✓ Anti-vibration pads are fixed between the engine/ alternator feet and the base frame
- ✓ The generator set can be lifted or carefully pushed / pulled by the base frame

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## Engine

| Engine manufacturer               |        | Cummins                    |
|-----------------------------------|--------|----------------------------|
| Engine model                      |        | KTA50-G3                   |
| Emissions statement               |        | ---                        |
| Number of cylinders               |        | 16                         |
| Cylinder arrangement              |        | 60° Vee                    |
| Cycle                             |        | Four stroke                |
| Aspiration                        |        | Turbocharged & Aftercooled |
| Bore×Stroke                       | mm×mm  | 159 x 159                  |
| Displacement                      | Liter  | 50.3                       |
| Compression Ratio                 |        | 13.9:1                     |
| Prime power/speed                 | kW/RPM | 1097/1500                  |
| Standby power/speed               | kW/RPM | 1227/1500                  |
| Speed governor                    |        | Electrical                 |
| Cooling system                    |        | Forced Water Cooling Cycle |
| Steady speed droop                | %      | ≤1%                        |
| Total lubrication system capacity |        | L 177                      |
| Coolant capacity (engine only)    |        | L 161                      |
| Fuel consumption at 100% load     | g/kWh  | 202 (at 1500RPM)           |
| Starter motor & Alternator        |        | DC24V                      |

## Alternator

|                           |   |
|---------------------------|---|
| Design                    | Brushless, single bearing, flexible disc        |
| Protection grade          | IP23  |
| Alternator cooling        | Direct drive centrifugal blower fan             |
| Insulation grade          | Class H   |
| Standard temperature rise | 125°C   |
| Exciter type              | Self-excited & AVR(Automatic Voltage Regulator) |
| Power factor              | 0.8   |
| Rated voltage             | 380-415V(Subject to customer requirement)       |
| Voltage regulation rate   | ≤ ± 1%  |

### Alternator brand option

| Alternator Brand | Alternator Model | Phase | Rated Speed | Rated Prime Power(kVA) |
|------------------|------------------|-------|-------------|------------------------|
| Stamford         | LVI 634G         | 3     | 1500RPM     | 1250                   |
| Leroy Somer      | LSA 50.2 M6      | 3     | 1500RPM     | 1250                   |
| FARADAY          | FD6E             | 3     | 1500RPM     | 1250                   |
| Raytheon Power   | WHI6J            | 3     | 1500RPM     | 1250                   |

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## Control System

Control supervision and protection panel is mounted on the genset base frame.  
 The control panel is equipped as follows:

### 1. Manual & Auto Start Control Panel

Panel equipment:

- ✓ The deepsea (UK original) control module
- ✓ Static battery charger
- ✓ Emergency stop push button



DSE4620

#### a) Generator set control module DSE4620 features:

- ✓ The module be utilised as a Manual or Auto Start Module for single gen-set applications
  - ✓ Back-lit LCD display
  - ✓ Remote start input
  - ✓ Hours counter provides accurate information for monitoring maintenance and warranty periods
  - ✓ Full engine monitoring and protection
  - ✓ The module can be programmed using the front panel or by using the DSE Configuration Suite PC software
  - ✓ 4 customizable Digital Inputs
  - ✓ 4 customizable Outputs
  - ✓ Easy push button control
- STOP/RESET -MANUAL –AUTO START

#### b) Parameters via LED display:

- ✓ Generator Volts (L-N)
- ✓ Generator Frequency (Hz)
- ✓ Engine speed
- ✓ Engine run time
- ✓ Battery volts

#### c) Parameters display via the pointer instruments:

- ✓ Generator Ampere (L1,L2,L3)
- ✓ Engine oil pressure
- ✓ Engine water temperature

#### d) Alarms & Auto shutdown protect:

- ✓ Over and Under Speed
- ✓ Low and High Battery Volt
- ✓ Engine start failure
- ✓ Charge fail
- ✓ Over Current
- ✓ Under / Over Generator Voltage
- ✓ Low Oil Pressure
- ✓ Emergency stop
- ✓ High engine temperature

### 2. Power Outlet Terminal Board Mounted on the Gen-set Base Frame

### The control modules option :



HGM6120



DSE7320



DSE8610

Remarks: For the specific and detailed features of the above types, please refer to “Control System Selection” file.

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## Generator Set Options and Accessories

### Generator set

- Silent generator set
- ABB MCCB circuit breaker

### Fuel system

- Outside fuel tank

### Exhaust system

- Residential exhaust silencer

### Alternator

- Space heater

### Low environment temperature

- Water heater
- Oil heater
- Battery heater

### Control system

- AMF function
- ATS control cabinet
- Multiple generator automatic paralleling

## Contact Us

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