

Diesel Generator Set RCS100



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 Chint Moulded Case Circuit Breaker (Up to 1250A)
- ✓ Packing: be secured with polythene dust cover

Genset Technical Data

Prime power	100kVA/80kW
Standby power	110kVA/88kW
Rated speed	1500 RPM
Output frequency	50 Hz
Phase	3
Rated voltage	400 V
Engine model(Cummins)	6BT5.9-G2
Alternator model(Stamford)	UCI 224C
Fuel consumption of 100% load	19 L/h
Fuel consumption of 75% load	14 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

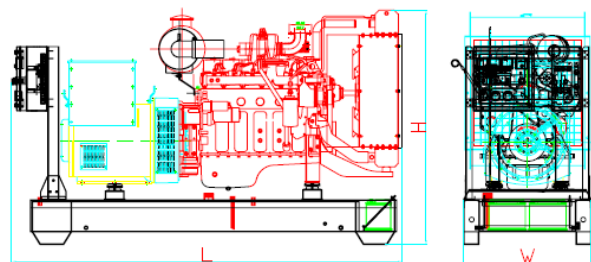
This rating is for the supply of continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted.

Rated voltage

Subject to customer requirement

Dimension and Weight

Length (L)	mm	2250
Width (W)	mm	850
Height (H)	mm	1270
Weight	kg	1150
Tank capacity	L	215



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
- ✓ Base frame design incorporates an 8-hours integral fuel tank
- ✓ The generator set can be lifted or carefully pushed / pulled by the base frame
- ✓ Dial type fuel gauge and drain plug on the fuel tank

Raytheon Power, your best global power partner

We reserve the right to change products' model and dimension at any time, without prior notice.

Engine

Engine manufacturer		Cummins
Engine model		6BT5.9-G2
Emissions statement		---
Number of cylinders		6
Cylinder arrangement		Vertical in-line
Cycle		Four stroke
Aspiration		Turbocharged
Bore×Stroke	mm×mm	102 x 120
Displacement	Liter	5.9
Compression Ratio		17.3:1
Prime power/speed	kW/RPM	86/1500
Standby power/speed	kW/RPM	92/1500
Speed governor		Electrical
Cooling system		Forced Water Cooling Cycle
Steady speed droop	%	≤1%
Total lubrication system capacity	L	16.4
Coolant capacity (engine only)	L	7.9
Fuel consumption at 100% load	g/kWh	217(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	UCI 274C	3	1500RPM	100
Leroy Somer	LSA 44.2VS45	3	1500RPM	105
FARADAY	FD3A	3	1500RPM	100
Raytheon Power	WHI274C	3	1500RPM	100

Raytheon Power, your best global power partner

We reserve the right to change products' model and dimension at any time, without prior notice.

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.

Raytheon Power, your best global power partner

We reserve the right to change products' model and dimension at any time, without prior notice.

Generator Set Options and Accessories

Generator set

- Silent generator set
- Trailer generator set
- Single phase generator set
- ABB MCCB circuit breaker

Fuel system

- 12 hour base tank(single wall)
- 24 hour base tank(single wall)
- Dual wall base fuel tank
- Outside fuel tank

Exhaust system

- Residential exhaust silencer

Alternator

- PMG excitation
- Space heater

Low environment temperature

- Water heater
- Oil heater
- Battery heater

Control system

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

Contact Us

RAYTHEON POWER MACHINERY (SUZHOU) CO., LTD

ADDRESS: No.599, Laixiu Road, Fenhu Economic Zone, Suzhou City,
Jiangsu Province, China

Tel: +86 21 52686721 Fax: +86 21 62772219

Email: info@raytheonpower.com

Web site: www.raytheonpower.com

DISTRIBUTED BY:

©2013 by Raytheon Power, all right reserved.

Raytheon Power, your best global power partner

We reserve the right to change products' model and dimension at any time, without prior notice.