Diesel Generator Set RCS50

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 to1250A)
- ✓ Packing: be secured with polythene dust cover

Genset Technical Data

Prime power	50kVA/40kW
Standby power	55kVA/44kW
Rated speed	1500 RPM
Output frequency	50 Hz
Phase	3
Rated voltage	400 V
Engine model(Cummins)	4BTA3.9-G2
Alternator model(Stamford)	UCI 224D
Fuel consumption of 100% load	11 L/h
Fuel consumption of 75% load	8.3 L/h
Voltage regulation rate	≤±1%

Dimension and Weight

Length (L)	mm	1850
Width (W)	mm	850
Height (H)	mm	1250
Weight	kg	920
Tank capacity	L	160

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.
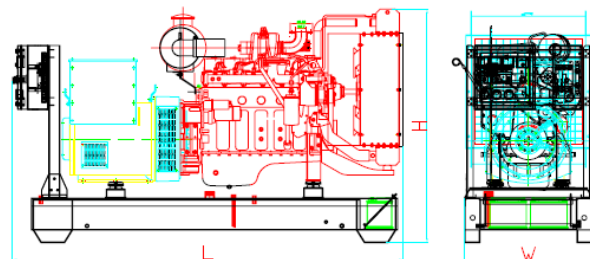
Rated voltage

Subject to customer requirement

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-houres 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

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Engine

Engine manufacturer		Cummins
Engine model		4BTA3.9-G2
Emissions statement		---
Number of cylinders		4
Cylinder arrangement		Vertical in-line
Cycle		Four stroke
Aspiration		Turbocharged & Aftercooled
Bore×Stroke	mm×mm	102 x 120
Displacement	Liter	3.9
Compression Ratio		17.3:1
Prime power/speed	kW/RPM	50/1500
Standby power/speed	kW/RPM	55/1500
Speed governor		Electrical
Cooling system		Forced Water Cooling Cycle
Steady speed droop	%	≤1%
Total lubrication system capacity	L	10.9
Coolant capacity (engine only)	L	8.3
Fuel consumption at 100% load	g/kWh	213 (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 224D	3	1500RPM	50
Leroy Somer	LSA 43.2M8	3	1500RPM	50
FARADAY	FD2B	3	1500RPM	50
Raytheon Power	WHI224D	3	1500RPM	50

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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

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

DSE4620

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
☐ 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

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