

Diesel Generating Set

P920C-60

MODEL	P920C-60	
Standby Power (60Hz)	920KW / 1150KVA	
Prime Power (60Hz)	840KW / 1050KVA	

## **Standard Features**

#### General Features:

- Engine (CCEC Cummins KTA38-G4)
- Radiator 40<sup>o</sup>C max, fans are driven by belt, with safety guard
- 24V charge alternator
- Alternator (STAMFORD) , single bearing alternator IP23, insulation class H/H
- Absorber
- Dry type air filter, fuel filter, oil filter
- Main line circuit breaker
- Standard control panel
- Two12V batteries, rack and cable
- Ripple flex exhaust pipe, exhaust siphon, flange, muffler
- User manual



## **Generator Ratings**

Voltage	HZ	Phase	P.F (COS¢)	Standby Amps	Standby Ratings (KW/KVA)	Prime Ratings (KW/KVA)
440/254	60	3	0.8	1641	920/1150	840/1050
480/277	60	3	0.8	1504	920/1150	840/1050

Prime Power1800 (PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97 (eqvISO8528); A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

Standby Power Rating (ESP): The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

## **Sales Promises**

Powerworld provides a full line of brand new and high quality products. Each and every unit is strictly factory tested.

Warranty is according to our standard conditions: 12 months or 1,000 running hours, subject to the earlier one

Service and parts are available from Powerworld or distributors in your location.



## **ENGINE DATA**

Manufacturer / Model: CCEC Cummins KTA38-G4 Air Intake System: Turbo, Water/Air Cooling

PB/W type fuel pump Fuel System:

Cylinder Arrangement: 12 in V Displacement: 37.8L

Bore and Stroke: 159×159 (mm) Compression Ratio: 13.9:1

Rated RPM: 1800rpm

Max. Standby Power at Rated RPM: 1100KW/1319HP

Governor Type: Electronic Frequency Regulation, Steady State: ≤1.5%

# **Exhaust System**

Exhaust Gas Flow: 3306L/s Exhaust Temperature: 513℃ Max Back Pressure: 10kPa

#### Air Intake System

Max Intake Restriction: 6.23kPa **Burning Capacity:** 1213L/s Intake Flow: 34950L/s

#### Fuel System

110%(Standby Power) Load: 221.7L/h 100%(Prime Power) Load: 199.4L/h Total Fuel Flow: 428L/h

## Oil System

Total Oil Capacity: 135L Oil Consumption: ≤4g/kwh Engine Oil Tank Capacity: 114L Oil Pressure at Rated RPM: 297-483kPa

# Cooling System

Total Coolant Capacity: 308L Thermostat: **82-93**℃ Max Water Temperature: 104℃

## **Emissions**

HC: 0.18g/BHP.hr NO<sub>x</sub>: 10.64g/BHP.hr CO: 1.96g/BHP.hr PM: 1.29g/BHP.hr 0.61g/BHP.hr SO<sub>2</sub>:





#### **ALTERNATOR SPECIFICATION**

#### **GENERAL DATA**

Compliance with GB755, BS5000, VDE0530, NEMAMG1-22, IED34-1, CSA22.2 and AS1359 standards.

#### **Alternator Data**

Manufacturer / Type: STAMFORD

Number of Phase: 3

Connecting Type: 3 Phase and 4 Wires, "Y" type connecting

Number of Bearing: 1

Power Factor: 0.8
Protection Grade: IP23

Altitude: ≤1000m

Exciter Type: Brushless, self-exciting

Insulation Class, Temperature Rise: H/H

Telephone Influence Factor (TIF): <50

THF: <2%

Voltage Regulation, Steady State: ≤±1%

Alternator Capacity: 1145KVA

Alternator Efficiencies: 94.2%

Air Cooling Flow: 2.21m³/s

## **GENERATING SET DATA**

Voltage Regulation: ≥±5%

Voltage Regulation, Stead State: ≤±1%

Sudden Voltage Warp (100% Sudden Reduce): ≤+25%

Sudden Voltage Warp (Sudden Increase): ≤-20%

Voltage Stable Time (100% Sudden Reduce): ≤6S

Voltage Stable Time (Sudden Increase) ≤6S

Frequency Reduce: ≤5% Adjustable

Frequency Regulation, Stead State: ≤1.5%

Frequency Waving: ≤0.8%

Sudden Frequency Warp (100% Sudden Reduce): ≤+12%

Sudden Frequency Warp (Sudden Increase): ≤-10%

Frequency Recovery Time (100% Sudden Reduce): ≤5S

Frequency Recovery Time (Sudden Increase): ≤5S

Noise Level: dB

Emission Level: Euro I

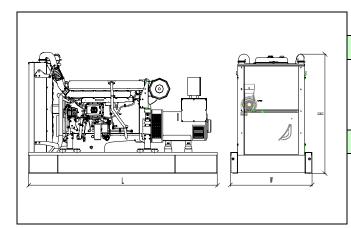
# **Diesel Generating Set**

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# **Options**

Engine	Fuel System	Control System
Heater	<ul> <li>Daily Fuel Tank</li> </ul>	<ul> <li>Auto Control Panel</li> </ul>
Battery Charger	<ul> <li>Base Fuel Tank</li> </ul>	<ul> <li>Remote Control Panel</li> </ul>
	<ul> <li>Water Separator</li> </ul>	<ul> <li>Auto Transfer Switch (ATS)</li> </ul>
		Control Panel
		<ul> <li>Paralleling System</li> </ul>
		<ul> <li>Electricity Output Cabinet</li> </ul>
Alternator	Others	Data
Anti Condensation Heater	<ul> <li>Rainproof Type</li> </ul>	<ul> <li>Engine Parts Drawing List</li> </ul>
• Permanent Magnet	<ul> <li>Soundproof Type</li> </ul>	<ul><li>Spare Parts</li></ul>
Generator (PMG)		
• Drop CT (For Paralleling)	Trailer Type	

# **Dimension & Weight**



# Standard Configuration (Open Type)

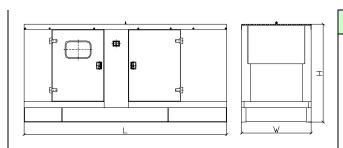
Overall Size: 4750 (mm) ×1850 (mm) ×2430 (mm)

Weight: 7500kg

# With Base Fuel Tank

Overall Size: 4750 (mm) ×1850 (mm) ×2450 (mm)

Weight: 7550kg



# Soundproof Type

Overall Size: 20'ft container

Weight: 9150kg



## **Standard Control Panel**



PowrWorld Standard Control Panel is the basic configuration for normal operation and usage, it is of some advantages such as easy to operate, various function and well protection. Operative buttons such as Turn On, Per-heat, Starting, Stop (Emergency Stop) on the panel. While malfunction occurs, control panel will stop the generator and also alarm with light or buzz.

# **Auto Module Control Panel**



**Automatic Control Panel** is the basic configuration for nobody on duty controlling generators. This kind of panel can accept the remote start/stop signals. (Controlled by ATS)

Features: adopted Czech Comap Brand auto control system, with large LCD display in English (or Chinese) to show the menu. With Auto Control Panel, generator are of various functions such as auto/manual stop (emergency stop), programmable plugs for input and output, detected data, symbols, diagram will show in the LCD, etc.

# **Auto Remote Control Panel**



Automatic Remote Control Panel is based on the Control Panel add the standard Auto and communication RS-232 (Modbus plugs: Communication Agreement). With Auto Remote Control Panel, it can realize remote control, remote detective, remote report by user using communicative net or center inspect and control system.