

## Generator set data sheet

**Model:** C900 D5  
**Frequency:** 50  
**Fuel type:** Diesel  
**kVA rating:** 820 Data Center Continuous

<b>Spec sheet:</b>	<b>SS12-CPGK</b>
<b>Noise data sheet (open/enclosed):</b>	<b>ND50-OSHHP/ND50-CS550</b>
<b>Airflow data sheet:</b>	<b>AF50-HHP</b>
<b>Derate data sheet (open/enclosed):</b>	<b>DD50-OSHHP/DD50-CSHHP</b>
<b>Transient data sheet:</b>	<b>TD50-HHP</b>

### Fuel consumption kVA (kW)

Ratings	820 (656)			
Load	1/4	1/2	3/4	Full
gph	10.1	18.7	26.6	35.4
L/hr	46.0	85.0	121.0	161.0

### Engine

Engine manufacturer	Cummins
Engine model	QSK23-G3
Configuration	Cast iron, in-line 6 cylinder
Aspiration	Turbocharged and after-cooled
Gross engine power output, kWm	701
BMEP at set rated load, kPa	2441
Bore, mm	170
Stroke, mm	170
Rated speed, rpm	1500
Piston speed, m/s	8.6
Compression ratio	16:1
Lube oil capacity, L	95
Overspeed limit, rpm	1800 ±50
Regenerative power, kW	72
Governor type	Electronic
Starting voltage	24 Volts DC

### Fuel flow

Maximum fuel flow, L/hr	685
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature, °C	70

## Air

Combustion air, m <sup>3</sup> /min	48.70
Maximum air cleaner restriction, kPa	6.2

## Exhaust

Exhaust gas flow at set rated load, m <sup>3</sup> /min	135.6
Exhaust gas temperature, °C	532
Maximum exhaust back pressure, kPa	10.1

## Standard set-mounted radiator cooling

Ambient design, °C	50
Fan load, kW <sub>m</sub>	16
Coolant capacity (with radiator), L	89
Cooling system air flow, m <sup>3</sup> /sec @ 12.7 mmH <sub>2</sub> O	14.7
Total heat rejection, Btu/min	19196
Maximum cooling air flow static restriction, mm H <sub>2</sub> O	19.1

## Weights\*

	Open	Enclosed
Unit dry weight, kgs	6539	N/A
Unit wet weight, kgs	6680	N/A

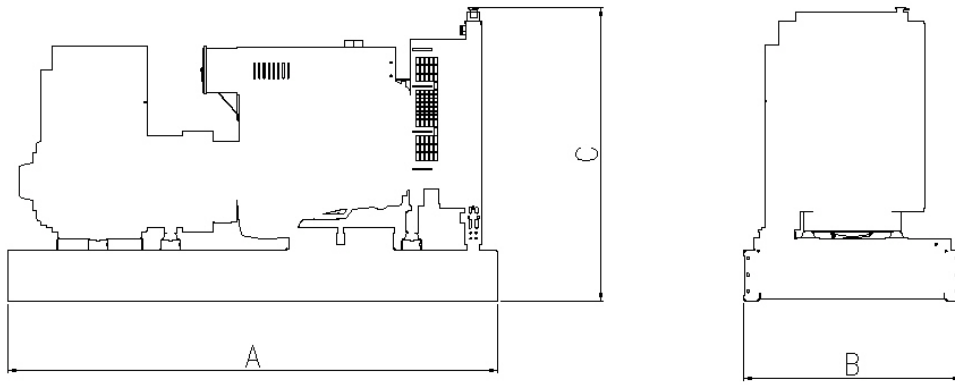
\* Weights represent a set with standard features. See outline drawing for weights of other configurations.

## Dimensions

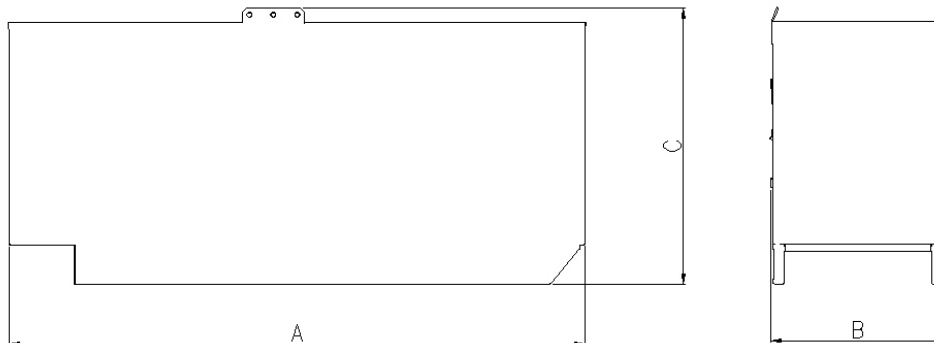
	Length	Width	Height
Standard open set dimensions, mm	4266	1879	2052
Enclosed set standard dimensions, mm	N/A	N/A	N/A

## Genset outline

### Open set



### Enclosed set



Outlines are for illustrative purposes only. Please refer to the genset outline drawing for an exact representation of this model.

## Alternator data

Connection	Temp rise °C	Duty	Alternator	Voltage
Wye, 3-phase	150/125	S/P	HC6H	380-440V

## Ratings definitions

**Data Center Continuous (DCC):** Applicable for supplying power continuously to a constant electrical load for unlimited hours in a data center application where a reliable utility is present. The Data Center Continuous (DCC) power rating is in accordance with ISO8528.

## Formulas for calculating full load currents:

### Three phase output

$$\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$$

### See your distributor for more information.

Cummins Power Generation  
Manston Park, Columbus Avenue  
Manston, Ramsgate  
Kent CT12 5BF, UK  
Telephone: +44 (0) 1843 255000  
Fax +44 (0) 1843 255902  
E-mail: [cpg.uk@cummins.com](mailto:cpg.uk@cummins.com)  
Web: [www.cumminspower.com](http://www.cumminspower.com)