

» Generator set data sheet

Model: C220 D5e (QSB7G5)
Frequency: 50
Fuel Type: Diesel

Spec sheet:	SS22-CPGK
Noise data sheet (Open/enclosed):	ND50-OS550 / ND50-CS550
Airflow data sheet:	AF50-550
Derate data sheet (Open/enclosed):	DD50-OS550 / DD50-CS550
Transient data sheet:	TD50-550

Fuel consumption	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	220 (176)				200 (160)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
gph	3.6	6.4	8.7	10.7	3.3	6.0	8.1	10.0
L/hr	16.4	29.3	39.4	48.8	15.2	27.5	36.8	45.6

Engine	Standby Rating	Prime Rating
Engine manufacturer	Cummins	
Engine model	QSB7G5	
Configuration	4 Cycle; In-line; 6 Cylinder Diesel	
Aspiration	Turbo Charged and Charge Air Cooled	
Gross engine power output, kWm	213	182
BMEP at set rated load, kPa	2537	2172
Bore, mm	107	
Stroke, mm	124	
Rated speed, rpm	1500	
Piston speed, m/s	6.2	
Compression ratio	17.3:1	
Lube oil capacity, L	15.1-17.4	
Overspeed limit, rpm	1500+15%	
Regenerative power, kW	14	
Governor type	Electronic	
Starting voltage	12V Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	106
Maximum fuel inlet restriction, mm Hg	127-254
Maximum fuel inlet temperature (°C)	71

Alternator data

Connection ¹	Temp rise °C	Duty ²	Alternator	Voltage
Wye, 3 Phase	163/125	S/P	UCI274H	380-415V
Wye, 3 Phase	125/105	S/P	UCI274J	380-440V

Ratings definitions

Emergency Standby Power (ESP)	Limited-Time running Power (LTP):	Prime Power (PRP)	Base Load (Continuous) Power (COP)
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

Formulas for calculating full load currents:

Three phase output

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

Single phase output

$$\frac{\text{kW} \times \text{Single Phase Factor} \times 1000}{\text{Voltage}}$$

Air	Standby Rating	Prime Rating
Combustion air, m ³ /min	12.72	12.30
Maximum air cleaner restriction, kPa	3.7-6.2	

Exhaust		
Exhaust gas flow at set rated load, m ³ /min	35.8	34.1
Exhaust gas temperature, °C	561	544
Maximum exhaust back pressure, kPa	10.2	

Standard set-mounted radiator cooling		
Ambient design, °C	50	
Fan load, KW _m	6.8	
Coolant capacity (with radiator), L	30.2	
Cooling system air flow, m3/sec @ 12.7mmH2O	5.91	
Total heat rejection, BTU/min	6516	5825
Maximum cooling air flow static restriction mmH2O	8.12	

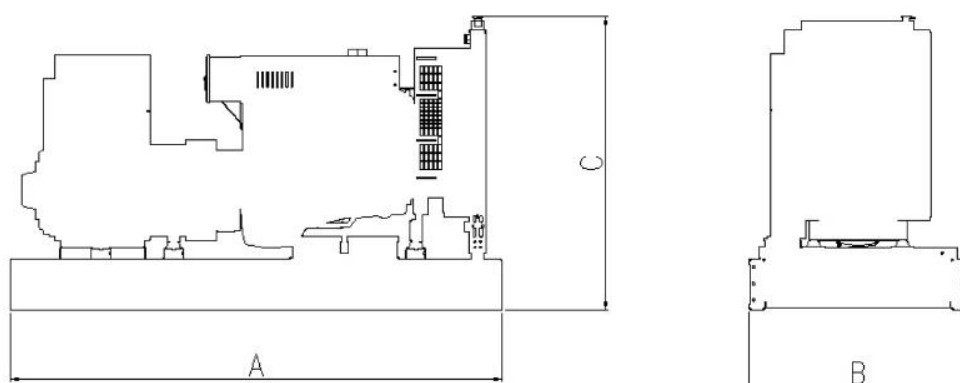
Weights*	Open	Enclosed
Unit dry weight kgs	1544	2698
Unit wet weight kgs	1670	3301

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

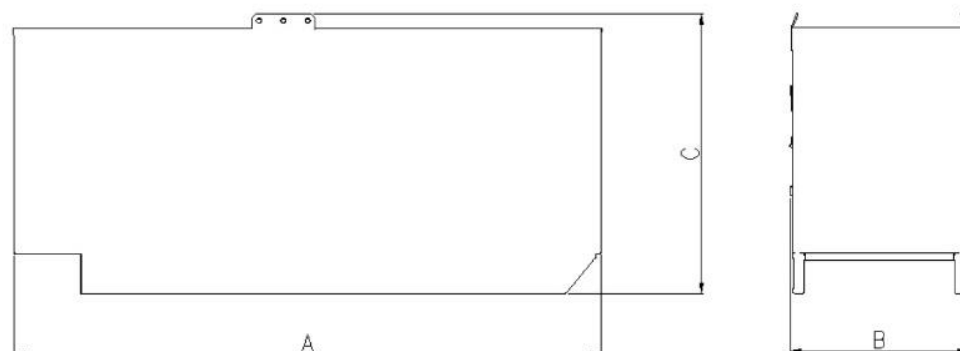
Dimensions	Length	Width	Height
Standard open set dimensions	2656	1100	1658
Enclosed set standard dimensions	3900	1100	2072

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.