

» **Generator set data sheet**
312.5 kVA Standby



Our energy working for you.™

Spec sheet:	SS8-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			
	Kw (kVA)				Kw (kVA)			
Ratings	250 (312.5)				225 (281.3)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	5.1	8.6	12.2	16.3	3.7	6.8	10.1	13.7
L/hr	23	39	56	74	17	31	46	63

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	QSL9 G5	
Configuration	4 Cycle; In-line; 6 Cylinder Diesel	
Aspiration	Turbo Charged and Charge Air Cooled	
Gross engine power output, kW/m	355	307
BMEP at set rated load, kPa	2668	2309
Bore, mm	114	
Stroke, mm	145	
Rated speed, rpm	1800	
Piston speed, m/s	8.7	
Compression ratio	16.8:1	
Lube oil capacity, L	26.5	
Overspeed limit, rpm	2100 ±50	
Regenerative power, kW	47	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	165
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature (°C)	70

Air	
Combustion air, m ³ /min	24.7 23.3
Maximum air cleaner restriction, kPa	6.2

Exhaust	Standby rating	Prime rating
Exhaust gas flow at set rated load, m ³ /min	65.2	56.1
Exhaust gas temperature, °C	580	500
Maximum exhaust back pressure, kPa	10.2	

Standard set-mounted radiator cooling		
Ambient design, °C	50	
Fan load, KW _m	11	
Coolant capacity (with radiator), L	15	
Cooling system air flow, m ³ /min @ 12.7mmH ₂ O	9.47	
Total heat rejection, BTU/min	12240	10190
Maximum cooling air flow static restriction mmH ₂ O	19.1	

Open set derating factors kVA (kW)

Note: Standard open genset options running at 400V, 150m above sea level. For enclosed product derates, please refer to datasheet - DD50-CS550.

	27°C	40°C	45°C	50°C	55°C
Standby	312.5 (250)	312.5 (250)	303.1 (242.5)	293.8 (235)	284.4 (227.5)
Prime	281.3 (225)	281.3 (225)	275.6 (220.5)	267 (213.6)	258.5 (206.8)

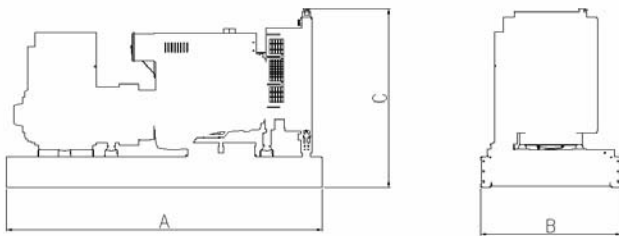
Weights*	Open	Enclosed
Unit dry weight kgs	2518	4095
Unit wet weight kgs	2570	4734

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

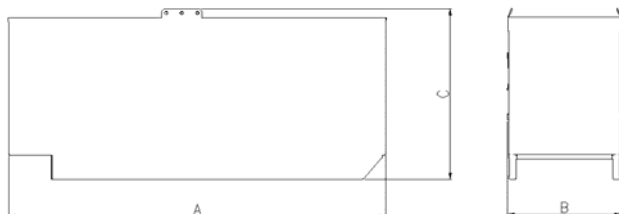
Dimensions	Length	Width	Height
Standard open set dimensions	3135	1100	1928
Enclosed set standard dimensions	4254	1424	2215

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

Feature code	Connection ¹	Temp rise degrees C	Duty ²	Alternator	Voltage
B252	Wye, 3 Phase	125/105	S/P	HC4D	416-480V
B683	Wye, 3 Phase	150/125C	S/P	UCD274K	440-480

Ratings definitions

Emergency Standby Power (ESP)	Limited-Time running Power	Prime Power (PRP):	Base Load (Continuous) Power
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

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

Single phase output

$$\frac{kW \times \text{SingleP haseFactor} \times 1000}{\text{Voltage}}$$

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
 Web: www.cumminspower.com