

» Generator set data sheet



**Power
Generation**

Our energy working for you.™

Spec sheet:	SS2-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	44 (35.2)				40 (32)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
gph	0.7	1.4	2.1	2.8	0.8	1.3	1.8	2.5
L/hr	3	6	10	13	4	6	8	12

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	4BT3.3G3	
Configuration	4 Cycle; In-line; 4 Cylinder Diesel	
Aspiration	Turbocharged	
Gross engine power output, kWm	51	46
BMEP at set rated load, kPa	1242	1139
Bore, mm	95	
Stroke, mm	115	
Rated speed, rpm	1500	
Piston speed, m/s	5.8	
Compression ratio	17:1	
Lube oil capacity, L	7	
Overspeed limit, rpm	1800 ±50	
Regenerative power, kW	4.5	
Governor type	Mechanical	
Starting voltage	12 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	17.2
Maximum fuel inlet restriction, mm Hg	73
Maximum fuel inlet temperature (°C)	60

Air	
Combustion air, m ³ /min	2.90
Maximum air cleaner restriction, kPa	6.2

Exhaust

	Standby rating	Prime rating
Exhaust gas flow at set rated load, m ³ /min	8.2	7.4
Exhaust gas temperature, °C	475	472
Maximum exhaust back pressure, kPa	10.2	

Standard set-mounted radiator cooling

Ambient design, °C	50	
Fan load, KW _m	0.7	
Coolant capacity (with radiator), L	9.1	
Cooling system air flow, m ³ /sec @ 12.7mmH ₂ O	0.92	
Total heat rejection, BTU/min	1800	1625
Maximum cooling air flow static restriction mmH ₂ O	12.7	

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	44 (35.2)	44 (35.2)	43.6 (34.9)	41.5 (33.2)	40.3 (32.2)
Prime	40 (32)	40 (32)	39.6 (31.7)	37.8 (30.2)	36.6 (29.3)

Weights*

	Open	Enclosed
Unit dry weight kgs	711	1035
Unit wet weight kgs	776	1100

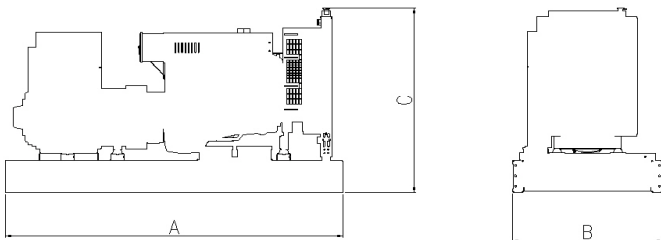
* Weights represent a set with standard features. See outline drawing for weights of other configurations

Dimensions

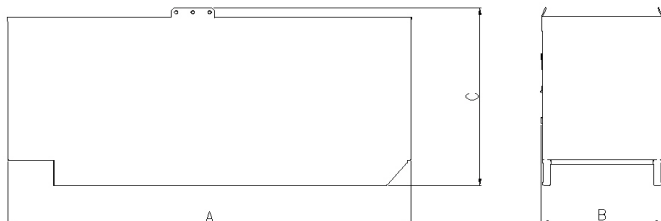
	Length	Width	Height
Standard open set dimensions	1753	930	1256
Enclosed set standard dimensions	2244	969	1575

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
B729	Wye, 3 Phase	150/125C	S/P	UC224C	380-440V

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

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

Single phase output

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