Model: C8D5 (X-Series)
Frequency: 50
Fuel Type: Diesel

» Generator set data sheet

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Spec sheet:	**SS23-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	8.3 (6.6)				7.5 (6)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
gph	0.3	0.4	0.5	0.6	0.3	0.4	0.5	0.6
L/hr	1.54	1.87	2.31	2.86	1.40	1.70	2.10	2.60

Engine

	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	X1.3G2	
Configuration	4 Cycle; In-line; 2 Cylinder Diesel	
Aspiration	Naturally Aspirated	
Gross engine power output, kWm	11.8	10.6
BMEP at set rated load, kPa	711	672
Bore, mm	95	
Stroke, mm	91	
Rated speed, rpm	1500	
Piston speed, m/s	4.55	
Compression ratio	18.5:1	
Lube oil capacity, L	4.5	
Overspeed limit, rpm	2050	
Regenerative power, kW	2	
Governor type	Electronic	
Starting voltage	12 Volts DC	

Fuel flow

Maximum fuel flow, L/hr	40
Maximum fuel inlet restriction, mm Hg	73
Maximum fuel inlet temperature (°C)	60

Air

Combustion air, m^3/min	11.60	11.60
Maximum air cleaner restriction, kPa	3.73 (HD clean element)	

Exhaust	Standby rating	Prime rating
Exhaust gas flow at set rated load, m^3/min	12.19	12.19
Exhaust gas temperature, °C	550	530
Maximum exhaust back pressure, kPa	4.133	

Standard set-mounted radiator cooling		
Ambient design, °C	50	
Fan load, KW_m	<1	
Coolant capacity (with radiator), L	4.65	
Cooling system air flow, m3/sec @ 12.7mmH2O	0.388	
Total heat rejection, BTU/min	7.5 (to coolant)	7.5 (to coolant)
Maximum cooling air flow static restriction mmH2O	0.125	

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	10 (8)	9.6 (7.68)	9.4 (7.52)	9.2 (7.36)	9 (7.2)
Prime	9.4 (8)	9.4 (7.5)	9.4 (7.5)	9.4 (7.5)	8.6 (6.9)

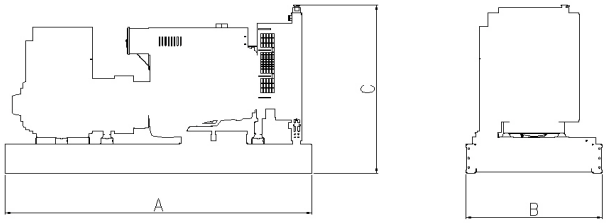
Weights*	Open	Enclosed
Unit dry weight kgs	N/A	RTF
Unit wet weight kgs	N/A	596

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

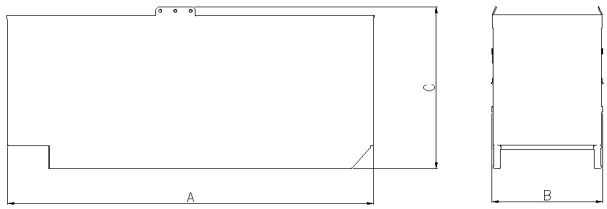
Dimensions	Length	Width	Height
Standard open set dimensions	N/A	N/A	N/A
Enclosed set standard dimensions	1460	850	1130

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.

Power Generation

Alternator data

Feature code	Connection[1]	Temp rise degrees C	Duty[2]	Alternator	Voltage
-	1 Phase	150/125C	S/P	PI044F	230
-	3 Phase	150/125C	S/P	PI044D	415

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

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

Single phase output

$$\frac{kW \times SinglePhaseFactor \times 1000}{Voltage}$$

See your distributor for more information.

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