

Generator set data sheet



Model: C8 D5 (X-series)
Frequency: 50
Fuel type: Diesel

Spec sheet:	SS25-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	1.5	1.9	2.4	3	1.3	1.7	2.1	2.6
L/hr	0.4	0.5	0.6	0.8	0.3	0.5	0.6	0.7

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

Exhaust

Exhaust gas flow at set rated load, m ³ /min	12.2	12.2
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, m ³ /sec @ 12.7 mmH ₂ O	0.388	
Total heat rejection, Btu/min	7.5 (to coolant)	7.5 (to coolant)
Maximum cooling air flow static restriction mm H ₂ O	0.125	

Weights*

	Open	Enclosed
Unit dry weight kgs		RTF
Unit wet weight kgs		596

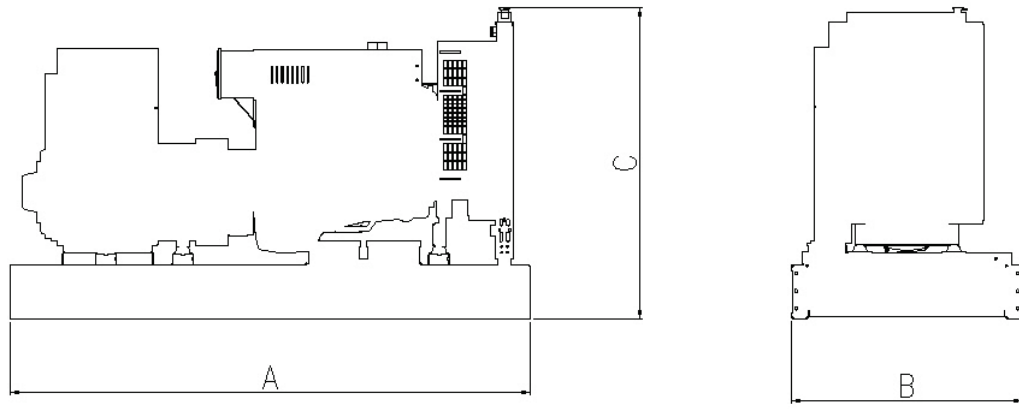
* Weights represent a set with standard features. See outline drawing for weights of other configurations.

Dimensions

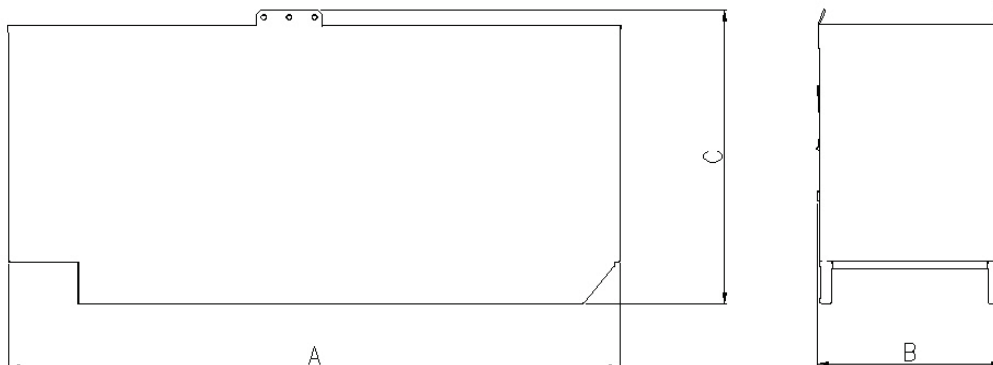
	Length	Width	Height
Standard open set dimensions			
Standard enclosed set dimensions	1460	886	1140

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.

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Alternator data

Connection ¹	Temp rise °C	Duty ²	Alternator	Voltage
1 phase	125/105C	S/P	PI044F	230
3 phase	163/125C	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) is 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

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

See your distributor for more information.

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