

**Model:** C28D5 (X-Series)  
**Frequency:** 50  
**Fuel Type:** Diesel

» Generator set data sheet



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<b>Spec sheet:</b>	SS23-CPGK
<b>Noise data sheet (Open/enclosed):</b>	ND50-OS550 / ND50-CS550
<b>Airflow data sheet:</b>	AF50-550
<b>Derate data sheet (Open/enclosed):</b>	DD50-OS550 / DD50-CS550
<b>Transient data sheet:</b>	TD50-550

<b>Fuel consumption</b>	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	27.5 (22)				24.8 (19.8)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
gph	0.4	0.7	1.1	1.4	0.3	0.7	1.0	1.3
L/hr	1.63	3.25	4.88	6.50	1.50	3.00	4.50	6.00

<b>Engine</b>	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	X2.5G2	
Configuration	4 Cycle; In-line; 3 Cylinder Diesel	
Aspiration	Naturally Aspirated	
Gross engine power output, kWm	27	24.37
BMEP at set rated load, kPa	851	768.1
Bore, mm	91.7	
Stroke, mm	127	
Rated speed, rpm	1500	
Piston speed, m/s	7.62	
Compression ratio	18.5:1	
Lube oil capacity, L	6.5	
Overspeed limit, rpm	1650	
Regenerative power, kW	2	
Governor type	Mechanical - Std	
Starting voltage	12 Volts DC	

<b>Fuel flow</b>	
Maximum fuel flow, L/hr	40
Maximum fuel inlet restriction, mm Hg	28.0249
Maximum fuel inlet temperature (°C)	60

<b>Air</b>	
Combustion air, m <sup>3</sup> /min	2.30
Maximum air cleaner restriction, kPa	4



<b>Exhaust</b>	<b>Standby rating</b>	<b>Prime rating</b>
Exhaust gas flow at set rated load, m <sup>3</sup> /min	N/A	N/A
Exhaust gas temperature, °C	660	660
Maximum exhaust back pressure, kPa	3.38	

<b>Standard set-mounted radiator cooling</b>		
Ambient design, °C	50	
Fan load, KW <sub>m</sub>	0.6	
Coolant capacity (with radiator), L	7	
Cooling system air flow, m3/sec @ 12.7mmH2O	0.78	
Total heat rejection, BTU/min	2561	N/A
Maximum cooling air flow static restriction mmH2O	N/A	

### 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.

	<b>27 °C</b>	<b>40 °C</b>	<b>45 °C</b>	<b>50 °C</b>	<b>55 °C</b>
<b>Standby</b>	27.5 (22)	26.1 (20.9)	25.7 (20.58)	25.2 (20.17)	24.7 (19.76)
<b>Prime</b>	24.8 (20)	23.5 (18.81)	23.2 (18.52)	22.7 (18.16)	22.2 (17.78)

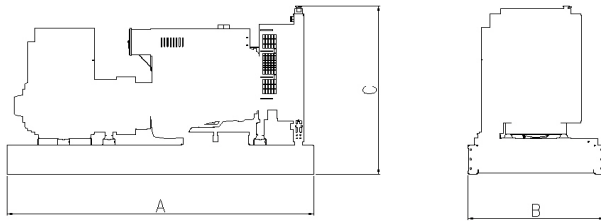
<b>Weights*</b>	<b>Open</b>	<b>Enclosed</b>
Unit dry weight kgs	441.5	766.5
Unit wet weight kgs	605	930

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

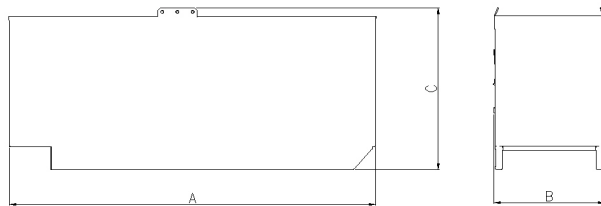
<b>Dimensions</b>	<b>Length</b>	<b>Width</b>	<b>Height</b>
Standard open set dimensions	1667	930	1247
Enclosed set standard dimensions	2082	930	1448

### 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 <sup>1</sup>	Temp rise degrees C	Duty <sup>2</sup>	Alternator	Voltage
-	3 Phase	163/125C	S/P	PI144E	380-415V
	3 Phase	150/125C	S/P	PI144F	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

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

See your distributor for more information.

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