

## Generator set data sheet



**Model:** C2500 D5A  
**Frequency:** 50 Hz  
**Fuel type:** Diesel

<b>Spec sheet:</b>	SS17-CPGK
<b>Noise data sheet (open):</b>	ND50-OSHHP
<b>Airflow data sheet:</b>	AF50-HHP
<b>Derate data sheet (open):</b>	DD50-OSHHP
<b>Transient data sheet:</b>	RTF

<b>Fuel consumption</b>	<b>Standby</b>				<b>Prime</b>			
	<b>kVA (kW)</b>				<b>kVA (kW)</b>			
Ratings	2500 (2000)				2250 (1800)			
Load	<b>1/4</b>	<b>1/2</b>	<b>3/4</b>	<b>Full</b>	<b>1/4</b>	<b>1/2</b>	<b>3/4</b>	<b>Full</b>
US gph	36.9	66.6	97.0	131.8	35.1	61.3	88.8	117.8
L/hr	140	252	368	500	133	232	336	446

<b>Engine</b>	<b>Standby rating</b>	<b>Prime rating</b>
Engine manufacturer	Cummins	
Engine model	QSK60-G8	
Configuration	Cast iron, 60° V16 cylinder	
Aspiration	Turbocharged and low temperature after-cooled	
Gross engine power output, kWm	2145	1942
BMEP at set rated load, kPa	2848	2575
Bore, mm	159	
Stroke, mm	190	
Rated speed, rpm	1500	
Piston speed, m/s	9.5	
Compression ratio	14.5:1	
Lube oil capacity, L	378	
Overspeed limit, rpm	1725 ±50	
Regenerative power, kW	146	
Governor type	Electronic	
Starting voltage	24 Volts DC	

<b>Fuel flow</b>	
Maximum fuel flow, L/hr	1515
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature, °C	70

Air	Standby rating	Prime rating
Combustion air, m <sup>3</sup> /min	156	145.2
Maximum air cleaner restriction, kPa	6.2	

### Exhaust

Exhaust gas flow at set rated load, m <sup>3</sup> /min	379	344.1
Exhaust gas temperature, °C	485	460
Maximum exhaust back pressure, kPa	6.7	

### Standard set-mounted radiator cooling

Ambient design, °C	40	
Fan load, kW <sub>m</sub>	44	
Coolant capacity (with radiator), L	490	
Cooling system air flow, m <sup>3</sup> /sec @ 12.7 mm H <sub>2</sub> O	34	
Total heat rejection, Btu/min	66000	56869
Maximum cooling air flow static restriction mm H <sub>2</sub> O	12.7	

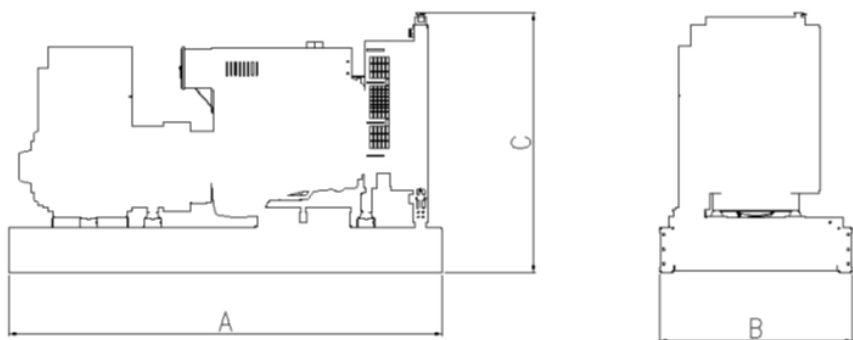
Weights*	Open	Enclosed
Unit dry weight kgs	16690	
Unit wet weight kgs	17217	

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

Dimensions	Length	Width	Height
Standard open set dimensions mm	6175	2494	3201

### Genset outline

#### Open set



Outlines are for illustrative purposes only. Please refer to the genset outline drawing for an exact representation of this model.

## Alternator data

Connection	Temp rise °C	Duty	Alternator	Voltage
Wye, 3-phase	150	ESP	LVSI804R	400-416 V
Wye, 3-phase	125	ESP	MVSI804R	3300 V
Wye, 3-phase	125	ESP	HVSI804S	6300-6600 V
Wye, 3-phase	125	ESP	HVSI804S	10500-11000 V

## 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

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