Generator set data sheet

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

Spec sheet:	**SS17-CPGK**
Noise data sheet (open):	**MSP-4103**
Airflow data sheet:	**AF50-HHP**
Derate data sheet (open):	**DD50-OSHHP**
Transient data sheet:	**RTF**

Fuel consumption

	Standby				**Prime**			
	kVA (kW)				**kVA (kW)**			
Ratings	2500 (2000)†				2250 (1800)			
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**
US gph	36.9	66.6	97.0	131.8	35.1	61.3	88.8	117.8
L/hr	140	252	367	499	133	232	336	446

†DCC available at standby power subject to Cummins' site-specific assessment. Please contact your Cummins Distributor.

Engine

	Standby rating	**Prime rating**
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	2144	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	

Fuel flow

Maximum fuel flow, L/hr	1514
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature, °C	71

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

Exhaust		
Exhaust gas flow at set rated load, m^3/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_m	33	
Coolant capacity (with radiator), L	494	
Cooling system air flow, m^3/sec @ 12.7 mm H_2O	40	
Total heat rejection, Btu/min	48675	RTF
Maximum cooling air flow static restriction mm H_2O	12.7	

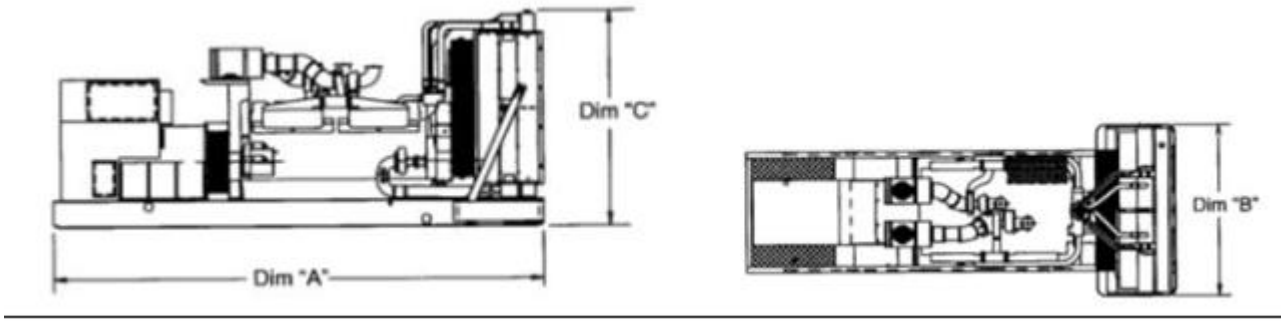
Weights*	Set-mount radiator	Remote-cooled
Unit dry weight kgs	17451	15425
Unit wet weight kgs	18173	15780

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

Dimensions	Length (A), mm	Width (B), mm	Height (C), mm
Set-mount radiator	6175	2494	3201
Remote-cooled	4994	2007	2555

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 ºC	Duty	Alternator	Voltage
Wye, 3-phase	150	ESP	S9L1D-C4	400 & 415
Wye, 3-phase	125	PRP	S9L1D-C4	400 & 415
Wye, 3-phase	150	ESP	S9H1D-D4	6300-6600 V
Wye, 3-phase	125	ESP	S9H1D-D4	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 data shown above represents gross engine performance and capabilities as per ISO 3046-1, obtained and corrected in accordance with ISO 15550	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 3046-1, obtained and corrected in accordance with ISO 15550.	Applicable for supplying power continuously to a constant load up to the full output rating for unlimited hours. No sustained overload capability is available for this rating. Consult authorized distributor for rating. (Equivalent to Continuous Power in accordance with ISO 8528 and ISO 3046-1, obtained and corrected in accordance with ISO 15550). This rating is not applicable to all generator set models.

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

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

For more information contact your local Cummins distributor or visit power.cummins.com

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DS53-CPGK (01/26)