Generator set data sheet

Model: C2500D5A
Frequency: 50Hz
Fuel type: Diesel

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	368	500	133	232	336	446

Engine

	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	QSK60-G8	
Configuration	Cast iron, 60 ° V16 cylinder	
Aspiration	Turbocharged and low temperature aftercooled	
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	280	
Overspeed limit, rpm	1725 ±50	
Regenerative power, kW	146	
Governor type	Electronic	
Starting voltage	24V Volts DC	

Fuel flow

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^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	6.8	

Standard set -mounted radiator cooling

Ambient design, °C	45	
Fan load, kW_m	52.2	
Coolant capacity (with radiator), L	526	
Cooling system air flow, m^3/sec @ 12.7 mmH_2O	33.5	
Total heat radiated to ambient, MJ/min (Btu/min)	19.39(18182)	18.86(17874)
Total heat rejection, MJ/min (Btu/min)	91.39(86182)	83.90(79520)
Maximum cooling air flow static restriction mm H_2O	12.7	

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Weights *

	Open
Unit dry weight kgs	17210
Unit wet weight kgs	17935

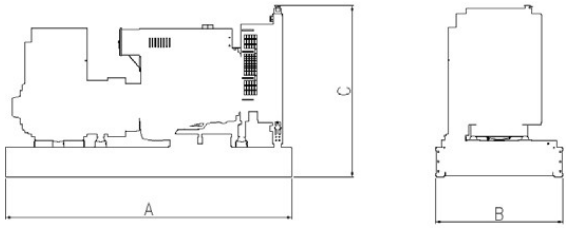
* Weights represent a set with standard features for HV Alternator. See outline drawing for weights of other configurations.

Dimensions

	Length	Width	Height
Standard open set dimensions	6175	2494	3041

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	Alternator	Voltage
Wye, 3-phase	125C	HVSI804S1	10500V,11000V
Wye, 3-phase	150C	PI734H1	380-416V
Wye, 3-phase	125C	HVSI804S1	6300V-6600V

Ratings definitions

Emergency st andby 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 percentoverload 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 inaccordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

Formulas for calculating full load currents:

Three phase ou tput

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

Single phase output

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

See your distributor for more information.

Cummins Power Generation

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