

Model: C500 D5e
Frequency: 50
Fuel Type: Diesel

» **Generator set data sheet**
500 kVA Standby



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Fuel consumption	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	499.6 (400)				449.6 (360)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	7.8	14.1	21.5	29.3	7.3	13.1	18.9	24.7
L/hr	30	53	81	111	28	50	72	94

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	QSX15G8	
Configuration	4 Cycle; In-Line; 6 Cylinder Diesel	
Aspiration	Turbo Charged and Charge Air Cooled	
Gross engine power output, kWm	500	444
BMEP at set rated load, kPa	2675	2371
Bore, mm	137	
Stroke, mm	169	
Rated speed, rpm	1500	
Piston speed, m/s	8.4	
Compression ratio	17:1	
Lube oil capacity, L	83	
Overspeed limit, rpm	1800 ±50	
Regenerative power, kWm	37	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	424
Maximum fuel inlet restriction, mm Hg	127
Maximum fuel inlet temperature (°C)	71

Air	
Combustion air, m ³ /min	36.3
Maximum air cleaner restriction, mm H ₂ O	635

Exhaust	Standby rating	Prime rating
Exhaust gas flow at set rated load, m ³ /min	82.2	75.4
Exhaust gas temperature, °C	515	488
Maximum exhaust back pressure, mmHg	76	

Standard set-mounted radiator cooling		
Ambient design, °C	50	
Fan load, KW _m	16	
Coolant capacity (with radiator), L	42	
Cooling system air flow, m ³ /min @ 12.7mmH ₂ O	678	
Total heat rejection, BTU/min	16700	13700
Maximum cooling air flow static restriction mmH ₂ O	12.7	

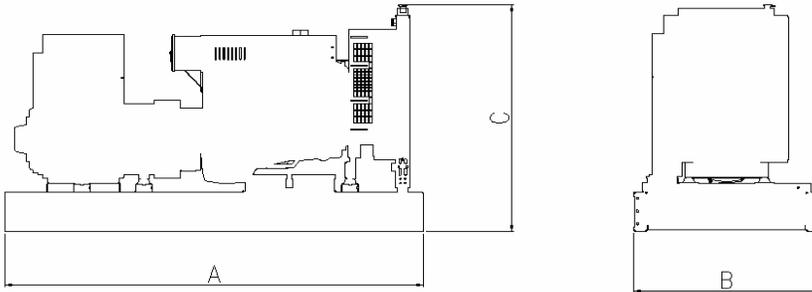
Weights*	Open	Enclosed
Unit dry weight kgs	4072	5092
Unit wet weight kgs	4824	5844

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

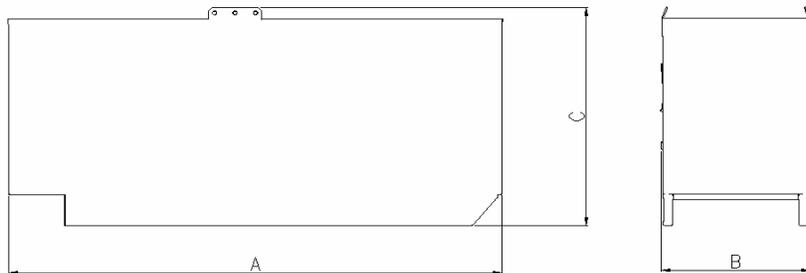
Dimensions	Length "A"	Width "B"	Height "C"
Standard open set dimensions, mm	3403	1500	2059
Enclosed set standard dimensions, mm	5084	1500	2370

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

Feature code	Connection ¹	Temp rise degrees C	Duty ²	Alternator	Voltage
-	Wye, 3 Phase	163/125C	S/P	HC5C	380-415V

Ratings definitions

Standby:	Limited Time Running:	Prime (unlimited running time):	Base Load (Continuous):
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 is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power 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 in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

Notes:

- Limited single phase capability is available from some three phase rated configurations. To obtain single phase rating, multiply the three phase kW rating by the single phase factor. All single phase ratings are at unity power factor.
- Standby (S) and Prime (P) ratings.

Formulas for calculating full load currents:

Three phase output

$$\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.732 \times 0.8}$$

Single phase output

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

See your distributor for more information.

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