

Generator set data sheet

Model: C825 D5
 Frequency: 50
 Fuel type: Diesel

Fuel consumption	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	825 (660)				750 (600)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	13	23	33	43	12	21	30	39
L/hr	50	88	124	164	46	81	113	148

Engine	Standby Rating	Prime Rating
Engine manufacturer	Cummins	
Engine model	QSK23-G3	
Configuration	Cast iron, in-line 6 cylinder	
Aspiration	Turbocharged and after-cooled	
Gross engine power output, kWm	768	701
BMEP at set rated load, kPa	2427	2268
Bore, mm	170	
Stroke, mm	170	
Rated speed, rpm	1500	
Piston speed, m/s	8.6	
Compression ratio	16:1	
Lube oil capacity, L	103	
Overspeed limit, rpm	1800 ±50	
Regenerative power, kW	72	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow

Maximum fuel flow, L/hr	684
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature, °C	70

Air	Standby Rating	Prime Rating
Combustion air, m ³ /min	53.28	48.9
Maximum air cleaner restriction, kPa	6.2	

Exhaust

Exhaust gas flow at set rated load, m ³ /min	147.78	135.54
Exhaust gas temperature, °C	543	532
Maximum exhaust back pressure, kPa	10.1	

Standard set-mounted radiator cooling

Ambient design, °C	40	
Fan load, kW _m	14.4	
Coolant capacity (with radiator), L	103	
Cooling system air flow, m ³ /sec @ 12.7 mmH ₂ O	23.6	
Total heat rejection, Btu/min	25410	23265
Maximum cooling air flow static restriction mm H ₂ O	12.7	

Weights*

	Open	Enclosed
Unit dry weight kgs	6219	N/A
Unit wet weight kgs	6335	N/A

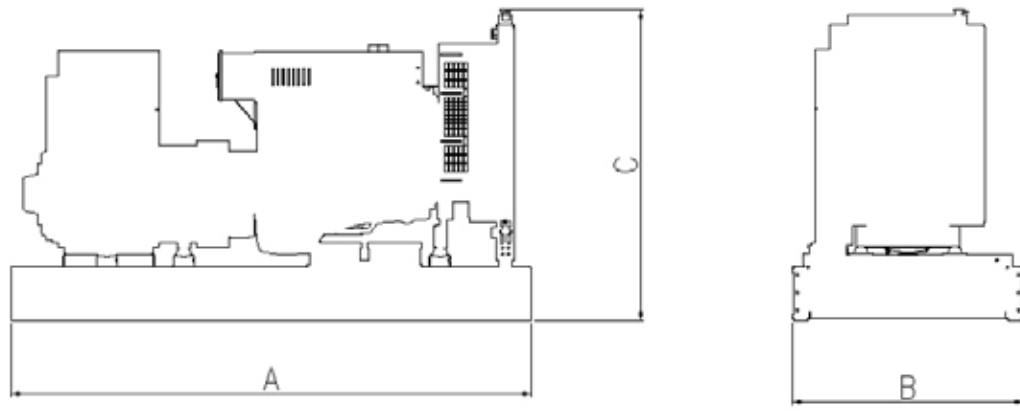
* Weights represent a set with standard features. See outline drawing for weights of other configurations.

Dimensions

	Length	Width	Height
Standard open set dimensions mm	4318	1856	2148
Enclosed set standard dimensions mm	N/A	N/A	N/A

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	163	S/P	HC6G	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) 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

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

See your distributor for more information.

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