Generator set data sheet

Model: C3000 D5
Frequency: 50 Hz
Fuel type: Diesel

Spec sheet:	SS27-CPGK

Fuel consumption

	Standby				Prime*			
	kW (kVA)				kW (kVA)			
Ratings	2400 (3000)				2200 (2750)			
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**
US gph	48.0	92.2	127.0	163.5	44.3	80.2	113.8	145.5
L/hr	181	349	481	619	168	304	431	551

*Radiator option is not available with Prime rating

Engine

	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	QSK78-G24	
Configuration	Cast iron, 60º V18 cylinder	
Aspiration	Turbocharged and low temperature after-cooled	
Gross engine power output, kWm (bhp)	2614 (3504)	2304 (3088)
BMEP at set rated load, kPa (psi)	2696 (391)	2386 (346)
Bore, mm (in)	170 (6.69)	
Stroke, mm (in)	190 (7.48)	
Rated speed, rpm	1500	
Piston speed, m/s	11.4	
Compression ratio	15.5:1	
Lube oil capacity, L (US gal)	466 (123)	
Overspeed limit, rpm	1725 ±50	
Regenerative power, kW	266	
Governor type	Electronic	
Starting voltage	24V Volts DC	

Fuel flow

Maximum fuel flow, L/hr (US ghp)	2225 (590)
Maximum fuel inlet restriction, mm Hg (kPa) (clean filter)	303.9 (10)
Maximum fuel inlet temperature, °C (°F)	70 (160)

Air	Standby rating	Prime rating
Combustion air, m^3/min (scfm)	201 (7090)	188 (6639)
Maximum air cleaner restriction, in H2O (kpa)	Dirty filter element 25 (6.2)	Clean filter element 15 (3.7)
Alternator cooling air, m_3/min (cfm)	167 (5897)	

Exhaust		
Exhaust flow at set rated load, m_3/min (cfm)	480 (16947)	446 (15731)
Exhaust temperature, °C (°F)	457.8 (856)	445.6 (834)
Maximum exhaust back pressure, kPa (inH2O)	6.8 (27.3)	

Standard set-mounted radiator cooling	
Ambient design, °C (°F)	50 (122)
Fan load, kWm (hp)	84.6 (113.4)
Coolant capacity (with radiator), L (US gal)	736(195)
Cooling system air flow, m^3/sec @ 12.7 mmH_2O (scfm)	39.1 (82848)
Total heat rejection, Btu/min (MJ/min)	99975 (105.5)
Maximum cooling air flow static restriction kPa (in H_2O)	.12 (.5)

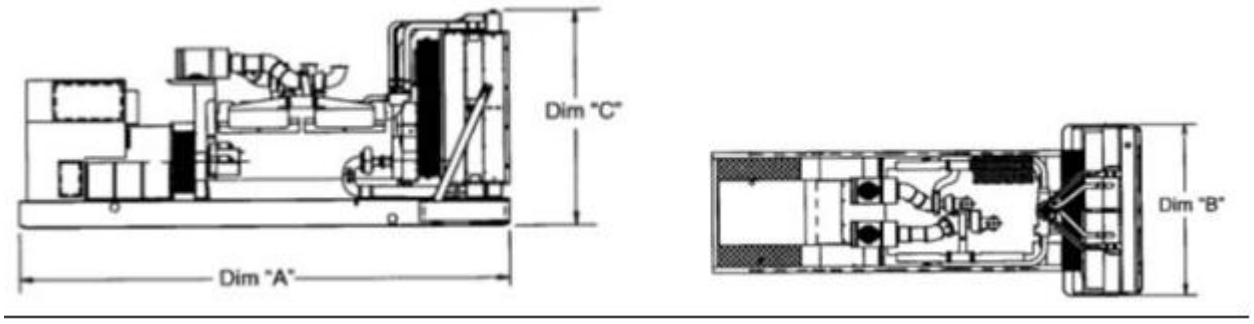
Weights*	Open
Unit dry weight kgs (lbs)	20710 (45657)
Unit wet weight kgs (lbs)	26202 (57766)

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

Dimensions	Length	Width	Height
Standard open set dimensions, mm (in)	7546 (297)	2494 (98)	3493 (137)

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

C3000D5	Connection	Temp rise °C	Duty	Alternator	Voltage
DS335-CPGK	Wye, 3-phase	150	ESP	LVSI804T	380-440
	Wye, 3-phase	80-125	ESP	S9H1D-F,G,H	6300-6600
	Wye, 3-phase	80-125	ESP	S9H1D-F,G,H	10500-11000
	Wye, 3-phase	125	PRP	LVSI804T	380-440
	Wye, 3-phase	80-105	PRP	S9H1D-F,G	6300-6600
	Wye, 3-phase	80-105	PRP	S9H1D-F,G	10500-11000
	Wye, 3-phase	125	DCC	LVSI804T	380-440
	Wye, 3-phase	80-105	DCC	S9H1D-F,G	6300-6600
	Wye, 3-phase	80-105	DCC	S9H1D-F,G	10500-11000

Ratings definitions

Emergency standby power (ESP):	Limited-time running power (LTP):	Prime power (PRP):
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.

Formulas for calculating full load currents:

Three phase output

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

Single phase output

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

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

Our energy working for you.™

DS335-CPGK PDA056G337 (11/25)