Generator set data sheet

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

Spec sheet:	SS18-CPGK

Fuel consumption

	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	3000 (2400)				2750 (2200)			
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**
US gph	46.0	80.5	115.0	150.3	43.0	74.6	106.2	137.8
L/hr	174	305	436	569	163	283	402	522

Engine

	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	QSK78-G9	
Configuration	Cast iron, 60º V18 cylinder	
Aspiration	Turbocharged and low temperature after-cooled	
Gross engine power output, kWm	2539	2304
BMEP at set rated load, kPa	2617	2375
Bore, mm	170	
Stroke, mm	190	
Rated speed, rpm	1500	
Piston speed, m/s	9.5	
Compression ratio	15.5:1	
Lube oil capacity, L	413	
Overspeed limit, rpm	1725 ±50	
Regenerative power, kW	189	
Governor type	Electronic	
Starting voltage	24V Volts DC	

Fuel flow

Maximum fuel flow, L/hr	2225
Maximum fuel inlet restriction, mm Hg (clean filter)	127
Maximum fuel inlet temperature, °C	70

Air	Standby rating	Prime rating
Combustion air, m^3/min	193	186
Maximum air cleaner restriction, kPa	6.2	

Exhaust

Exhaust gas flow at set rated load, m^3/min	432	415
Exhaust gas temperature, °C	427	422
Maximum back pressure, kPa	6.7	

Standard set-mounted radiator cooling

Ambient design, °C	RTF	
Fan load, kW_m	RTF	
Coolant capacity (with radiator), L	RTF	
Cooling system air flow, m^3/sec @ 12.7 mmH_2O	RTF	
Total heat rejection, Btu/min	RTF	RTF
Maximum cooling air flow static restriction mm H_2O	RTF	

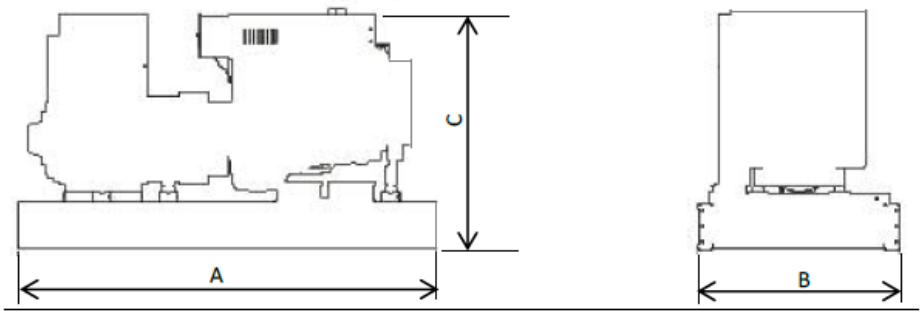
Weights*	Open
Unit dry weight kgs	18964
Unit wet weight kgs	19560

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

Dimensions	Length	Width	Height
Standard open set dimensions	5670	2305	2708

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	150/125/105	S/P/C	LVSI804T	380-440
Wye, 3-phase	80-150	S/P/C	MVSI804R,S,T,W	3300
Wye, 3-phase	80-125	S/P/C	HVSI804S,T,W,X	6600/11000

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

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

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

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DS335-CPGK (08/17)