Generator Set Data Sheet



Model:	C3000D6EB
Frequency:	60 Hz
Fuel Type:	Diesel
kW Rating:	3000 Standby
Emissions level:	Pending PEPA NSPS Stationary Emergency Tier 2

Exhaust emission data sheet:	ТВС
Exhaust emission compliance sheet:	твс
Sound performance data sheet:	твс
Cooling performance data sheet:	твс
Prototype test summary data sheet:	твс
Remote radiator cooling outline:	N/A
High ambient cooling system outline (ship loose):	твс
Enhanced high ambient cooling system outline (ship loose):	ТВС

	Standby kW (kVA)			
Fuel Consumption*				
Ratings	3000	(3750)		
Load	1/4	1/2	3/4	Full
US gph	61	109	159	210
L/hr	230	413	602	796
* Tolerance within +/- 10%				

Engine*	Standby rating
Engine manufacturer	Cummins Inc.
Engine model	QSK78-G37
Configuration	Cast Iron, V 18 cylinder
Aspiration	Turbocharged and charge air cooled (air to air)
Gross engine power output, kWm (bhp)	3312 (4441)
BMEP at set rated load, kPa (psi)	2848 (413)
Bore, mm (in.)	170.0 (6.69)
Stroke, mm (in.)	190.0 (7.48)
Rated speed, rpm	1800
Piston speed, m/s (ft/min)	11.4 (2243)
Compression ratio	15.5:1
Lube oil capacity, L (qt)	413 (436)
Overspeed limit, rpm	1980
Regenerative power, kW	256

Tolerance within +/- 10%

Fuel Flow*	Standby rating
Maximum fuel flow, L/hr (US gph)	1733 (458)
Maximum fuel inlet restriction with clean filters, kPa (in Hg)	20 (6)
Maximum fuel inlet restriction with dirty filters, kPa (in Hg)	34 (10)
Maximum fuel return restriction, kPa (in Hg)	15 (4.5)
Maximum fuel inlet temperature, °C (°F)	70 (158)
* Tolerance within +/- 10%	

Air*

Combustion air, m ³ /min (scfm) – Normal Duty	267 (9434)
Maximum air cleaner restriction, kPa (in H ₂ O)	6 (25)
Alternator cooling air, m ³ /min (cfm)	3.3 (118)
* Tolerance within +/- 10%	

Exhaust*

Exhladist	
Exhaust flow at set rated load, m ³ /min (cfm)	671 (23680)
Exhaust temperature, °C (°F)	479 (894)
Maximum back pressure, kPa (in H ₂ O)	6.8 (27.3)
* 7 1	

* Tolerance within +/- 10%

High Ambient Cooling System*[†] (ship loose)

Ambient design, °C (°F)	40 (104)
Coolant capacity (with radiator), L (US gal)	450 (119)
Cooling system air flow, m ³ /min (scfm)	2700 (83400)
Maximum cooling air flow static restriction, kPa (in H ₂ O)	0.25 (1.0)
* Tolerance within +/- 10%	

[†] Values subject to change

Enhanced High Ambient Cooling System (ship loose)

Ambient design, °C (°F)	50 (122)
Coolant capacity (with radiator), L (US gal)	ТВС
Cooling system air flow, m ³ /min (scfm)	TBC
Maximum cooling air flow static restriction, kPa (in H ₂ O)	ТВС

Weights¹

Unit dry weight kgs (lbs)	24700 (54454)
Unit wet weight kgs (lbs)	25500 (56218)

¹ Weights represent a set with standard features with cooling system assembled.

Connection ¹	Temp rise °C	Duty	Alternator	Voltage
Wye	80, 105, 1 <mark>25,</mark> 150	ESP, DCC	S9 D, E, F, G	416, <mark>480,</mark> 600
Wye	80, 105, 125, 150	ESP, DCC	S9 E, F, G, H	4160
Wye	80, 105, 125, 150	ESP, DCC	S9 E, F, G, H	12470, 13200, 13800

Notes:

¹ Single phase power can be taken from three phase generator sets at up to the value listed in the single phase factor column for the generator set nameplate kW rating at unity power factor.

Ratings Definitions

Emergency Standby Power (ESP):

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.

Data Center Continuous (DCC):

Applicable for supplying power continuously to a constant or varying electrical load for unlimited hours in a data center application.

Notes: Rating definitions provided for reference only

Formulas for Calculating Full Load Currents:

Three phase output

Single phase output

kW x 1000 Voltage x 1.73 x 0.8 kW x SinglePhaseFactor x 1000 Voltage

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.