Generator set data sheet

Model: C2250D5-PB
Frequency: 50Hz
Fuel type: Diesel

Spec sheet:	EA_T_CC_21_EN

Fuel consumption*

	Standby				Prime			
	kVA(kWe)				kVA(kWe)			
Ratings	2250(1800)				2000(1600)			
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**
US gph	31.9	58.1	84.6	111.6	29.0	52.2	75.7	99.5
L/h	121	220	320	422	110	198	287	377

* Fuel consumption exclude accessary Genset.

Engine

	Standby	Prime
Engine manufacturer	Cummins	
Engine model	QSK60-G4	
Configuration	4-Cycle; 60° Vee; 16-Cylinder	
Aspiration	Turbocharged and Low TemperatureAftercooled	
Fuel system	Cummins HPI-PT	
Gross engine power output, kWm (bhp)	1915(2567)	1730(2319)
BMEP at set rated load, kPa (psi)	2544(369)	2296(333)
Bore, mm (in.)	159(6.25)	
Stroke, mm (in.)	190(7.48)	
Displacement, litre (in^3)	60.2(3672)	
Rated speed, rpm	1500	
Piston speed, m/s (ft/min)	9.49(1869)	
Compression ratio	14.5:1	
Lube oil capacity, L (US gal)	280(74)	
Overspeed limit, rpm	1725	
Regenerative power,kWm(HP)	146(196)	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow

Maximum fuel flow, L/hr (US gph)	1893(500)
Maximum fuel inlet restriction, mmHg (in Hg))	203(8)
Maximum fuel inlet temperature, ℃ (℉)	70(158)
Maximum Allowable Head on Injector Return Line, kPa (in Hg)	30.5(9)

Air

	Standby	Prime
Combustion air, CFM (m^3/min)	5090(144)	4800(135.9)
Maximum air cleaner restriction, kPa (in H_2O)	3.7-6.2(15-25)	

Exhaust

Exhaust flow at set rated load, CFM (m^3/min)	11880(336.4)	10990(311.2)
Exhaust temperature, ℃ (℉)	450(835)	430(805)
Heat to Exhaust, Btu/min (kWm)	75280 (1325)	67010(1180)
Maximum back pressure, kPa (in H_2O)	6.8(27.2)	

Cooling system

Ambient design, ℃ (℉)	50(122)
Fan load[1], kWe (HP)	18(24)
Coolant capacity (with radiator), L (US gal)	615(162)
Cooling system air flow, m^3/s (scfm)	28(59964)
Cooling System heat rejection[2], MJ/min (Btu/min)	89.19(84537)

[1]The max electrical power consumed by the fan

[2]Cooling system heat rejection includes jacket water circuit, aftercooler circuit and fule circuit

Ventilation system

Fan load[1], kWe (HP)	8(11)
Total heat radiated[2], MJ/min (Btu/min)	17.73(16800)
Ventilation Air Flow, m^3/s	12.4

[1]The electrical power consumed by the fan

[2]Total heat radiated includes engine radiated heat to ambient and alternator radiated heat to ambient,exclude exhaust radiated heat to ambient

Weights*

Unit dry weight, kgs	31412
Unit wet weight, kgs	31846

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

Dimensions	Length(A)	Width(B)	Height(C)
Standard Containerized set dimensions, mm	12192	2438	2896

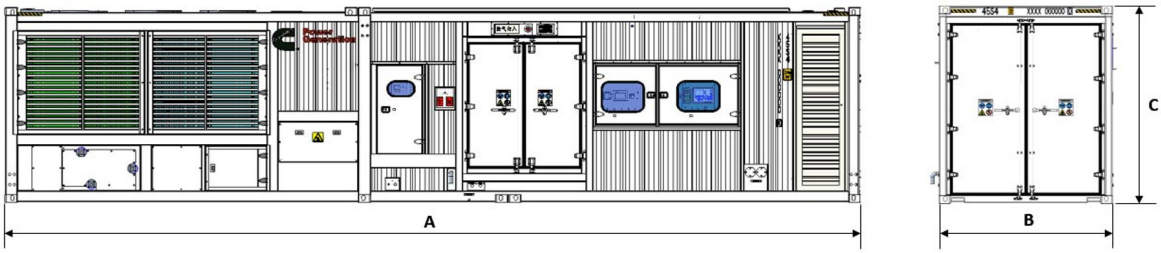
Noise data

Containerized set sound power level , dB(A) @ 100% Standby	107.1
Containerized set sound pressure level , dB(A) @ 100% Standby, 1m	83.0

*With VFD fan 40Hz.

Genset outline

Containerized Genset



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*	Winding No.	Alternator	Voltage
Wye, 3Phase	150/125	S/P	83	S9H1D-B41	10500V，11000V
Wye, 3Phase	150/125	S/P	983	S9H1D-C41	10500V，11000V
Wye, 3Phase	150/125	S/P	312	S7L1D-H41	380-415V

* Standby (S), Prime (P).

Ratings definitions

Emergency Standby Power (ESP):	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 ISO 3046-1, obtained and corrected in accordance with ISO 15550.	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 ISO8528,ISO 3046-1 and corrected in accordance with ISO15550.

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

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

For more information contact your local Cummins distributor

Power Generation

EA_S_CC_66_EN (06/24)