

Generator set data sheet



Model: C2250 D5
Frequency: 50 Hz
Fuel type: Diesel

Spec sheet:	SS17-CPGK
Noise data sheet:	ND50-OSHHP
Airflow data sheet:	AF50-HHP
Derate data sheet:	DD50-OSHHP
Transient data sheet:	RTF

Fuel consumption	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	2250 (1800) [†]				2000 (1600)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	36.5	60.5	86.6	115.3	30.1	52.7	76.9	103.9
L/hr	138	229	328	437	114	199	291	393

[†]DCC available at standby power subject to Cummins' site-specific assessment. Please contact your Cummins Distributor.

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	QSK60-G4	
Configuration	Cast iron, 60° V16 cylinder	
Aspiration	Turbocharged and low temperature after-cooled	
Gross engine power output, kWm	1734	1630
BMEP at set rated load, kPa	2544	2296
Bore, mm	159	
Stroke, mm	190	
Rated speed, rpm	1500	
Piston speed, m/s	9.5	
Compression ratio	14.5:1	
Lube oil capacity, L	378	
Overspeed limit, rpm	1725 ±50	
Regenerative power, kW	146	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	1893
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature, °C	70

Air	Standby rating	Prime rating
Combustion air, m ³ /min	144	136
Maximum air cleaner restriction, kPa	6.2	

Exhaust

Exhaust gas flow at set rated load, m ³ /min	336	311
Exhaust gas temperature, °C	446	429
Maximum exhaust back pressure, kPa	6.8	

Standard set-mounted radiator cooling

Ambient design, °C	40	
Fan load, kW _m	33	
Coolant capacity (with radiator), L	494	
Cooling system air flow, m ³ /sec @ 12.7 mm H ₂ O	26.4	
Total heat rejection, Btu/min	66252	59428
Maximum cooling air flow static restriction mm H ₂ O	12.7	

Optional set-mounted radiator cooling

Ambient design, °C	50	
Fan load, kW _m	51	
Coolant capacity (with radiator), L	558	
Cooling system air flow, m ³ /sec @ 12.7 mm H ₂ O	30.6	
Total heat rejection, Btu/min	66252	59428
Maximum cooling air flow static restriction mm H ₂ O	12.7	

Optional Remote Radiator Cooling¹

Set Coolant capacity, L	193	
Max flow rate at max friction head, jacket water circuit, L/min	RTF	
Max flow rate at max friction head, after-cooler circuit, L/min	RTF	
Heat rejected, jacket water circuit, Btu/min	28300	25460
Heat rejected, after-cooler circuit, Btu/min	RTF	RTF
Total heat radiated to room, Btu/min	9990	9000
Maximum friction head, jacket water circuit, kPa	48	
Maximum friction head, after-cooler circuit, kPa	34	
Maximum static head, jacket water circuit, m	RTF	
Maximum static head, after-cooler circuit, m	RTF	
Maximum jacket water outlet temp, °C	RTF	
Maximum after-cooler inlet temp at 25 °C ambient, °C	RTF	
Maximum after-cooler inlet temp, °C	RTF	

¹ For non-standard remote installations contact your local Cummins representative.

² Includes engine and alternator heat rejection; does not include heat from aftertreatment.

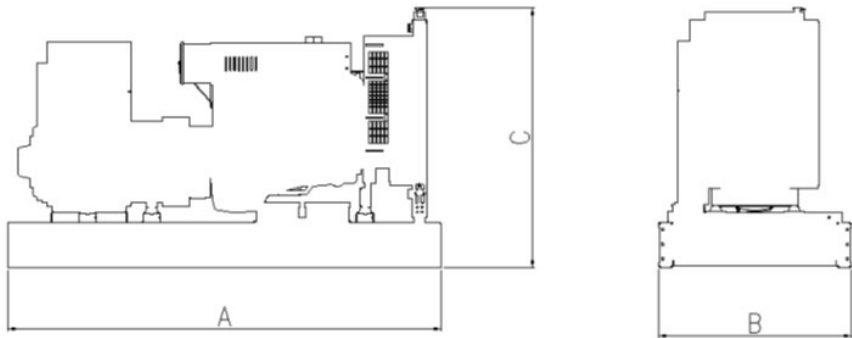
Weights*	Open	Enclosed
Unit dry weight kgs	16404	
Unit wet weight kgs	17471	

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

Dimensions	Length	Width	Height
Standard open set dimensions mm	6175	2286	2537
Enclosed set standard dimensions mm			

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	150/125	S/P	PI734G	400 – 440 V
Wye, 3-phase	105*	P	PI734G	400 – 440 V
Wye, 3-phase	150/125	S/P	S9M1D-D4	3300 V
Wye, 3-phase	125/105	S/P	S9H1D-D4	6300 – 6600 V
Wye, 3-phase	125/105	S/P	S9H1D-C4	10500 – 11000 V
Wye, 3-phase	105/80	S/P	S9H1D-D4	10500 – 11000 V

*Option available only through ETO (Engineering to Order)

Ratings definitions

Emergency Standby Power (ESP):	Limited-Time Running Power (LTP):	Prime Power (PRP):	Base Load (Continuous) Power (COP):
<p>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</p>	<p>Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.</p>	<p>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.</p>	<p>Applicable for supplying power continuously to a constant load up to the full output rating for unlimited hours. No sustained overload capability is available for this rating. Consult authorized distributor for rating. (Equivalent to Continuous Power in accordance with ISO 8528 and ISO 3046-1, obtained and corrected in accordance with ISO 15550). This rating is not applicable to all generator set models.</p>

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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