

Generator set data sheet



Model: C275D5B
Frequency: 50 Hz
Fuel type: Diesel

Spec sheet:	
Noise data sheet (open):	
Airflow data sheet:	
Derate data sheet (open):	
Transient data sheet:	

Fuel consumption	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	275 (220)				250 (200)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	4.2	7.9	11.9	15.9	3.7	7.1	10.8	14.3
L/hr	16	30	45	60	14	27	41	54

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	6LTAA9.5-G3	
Configuration	Cast iron, 6 cylinder	
Aspiration	Turbocharged and after-cooled	
Gross engine power output, kWm	280	250
BMEP at set rated load, kPa	2359	2103
Bore, mm	116.5	
Stroke, mm	148	
Rated speed, rpm	1500	
Piston speed, m/s	7.4	
Compression ratio	16.1:1	
Lube oil capacity, L	28.1	
Overspeed limit, rpm	1875	
Regenerative power, kW	26	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	208
Maximum fuel inlet restriction, mm Hg (clean filter)	150
Maximum fuel inlet temperature, °C	70

Air	Standby rating	Prime rating
Combustion air, L/sec	298	274
Maximum air cleaner restriction, kPa	6.2	

Exhaust

Exhaust gas flow at set rated load, L/sec	660	576
Exhaust gas temperature, °C	482	458
Maximum exhaust back pressure, kPa	10	

Standard set-mounted radiator cooling

Ambient design, °C	50	
Fan load, kWm	13	
Coolant capacity (with radiator), L	55.5	
Cooling system air flow, m ³ /sec @ 12.7 mm H ₂ O	7.9	
Total heat rejection, kW	35	35
Maximum cooling air flow static restriction kPa	10	

Weights*

	Open	Enclosed
Unit dry weight, kgs	2282	3640
Unit wet weight, kgs	2738	4190

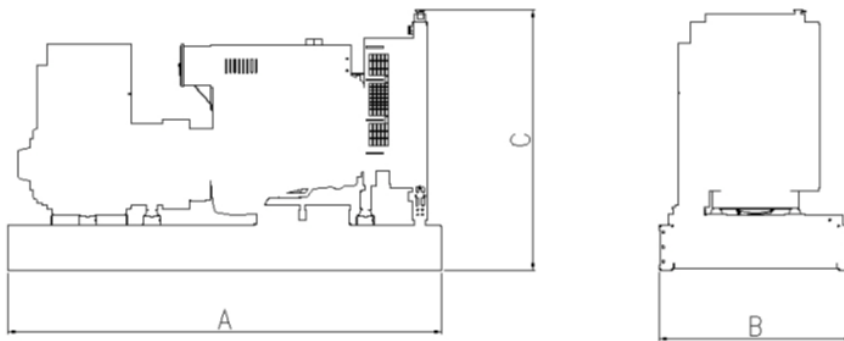
*Weights represent a set with standard features. See outline drawing for weights of other configurations.

Dimensions

	Length	Width	Height
Standard open set dimensions, mm	2800	1100	1871
Enclosed set standard dimensions, mm	4256	1424	2216

Genset outline

Open set



Enclosed 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	163/125	S/P	UCD274K	380-440 V

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

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