

Generator set data sheet



Model: C80 D6 (6B)
Frequency: 60
Fuel type: Diesel

Spec sheet:	SS28-CPGK
Noise data sheet (open/enclosed):	ND60-CS550
Airflow data sheet:	AF60-550
Derate data sheet (open/enclosed):	TBD
Transient data sheet:	TD60-550

Fuel consumption	Standby				Prime			
	kW (kVA)				kW (kVA)			
Ratings	80 (100)				73 (91)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
gph	1.6	2.9	4.3	6.0	1.5	2.6	3.9	5.3
L/hr	7.3	13.1	19.7	27.2	6.6	12.0	17.6	24.0

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	6BTA5.9 G6	
Configuration	Inline 6-cylinder diesel	
Aspiration	Turbocharged and after-cooled	
Gross engine power output, kWm	132	119
BMEP at set rated load, kPa	1492	1344
Bore, mm	102	
Stroke, mm	120	
Rated speed, rpm	1800	
Piston speed, m/s	7.2	
Compression ratio	17.3:1	
Lube oil capacity, L	16.4	
Overspeed limit, rpm	2100	
Regenerative power, kW	7.272727273	
Governor type	Electronic	
Starting voltage	12 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	45
Maximum fuel inlet restriction, mm Hg	8
Maximum fuel inlet temperature, (°C)	71

Air	Standby rating	Prime rating
Combustion air, m ³ /min	175.00	162.00
Maximum air cleaner restriction, kPa	6	

Exhaust

Exhaust gas flow at set rated load, m ³ /min	28.2	19.5
Exhaust gas temperature, °C	551	528
Maximum exhaust back pressure, kPa	10	

Standard set-mounted radiator cooling

Ambient design, °C	49.3	
Fan load, kW _m	5.60992	
Coolant capacity (with radiator), L	19.75	
Cooling system air flow, m ³ /sec @ 12.7mm H ₂ O	3.24	
Total heat rejection, BTU/min	11464	10112
Maximum cooling air flow static restriction, mm H ₂ O	12.7	

Weights*

	Open	Enclosed
Unit dry weight, kgs	1263	1963
Unit wet weight, kgs	1574	2274

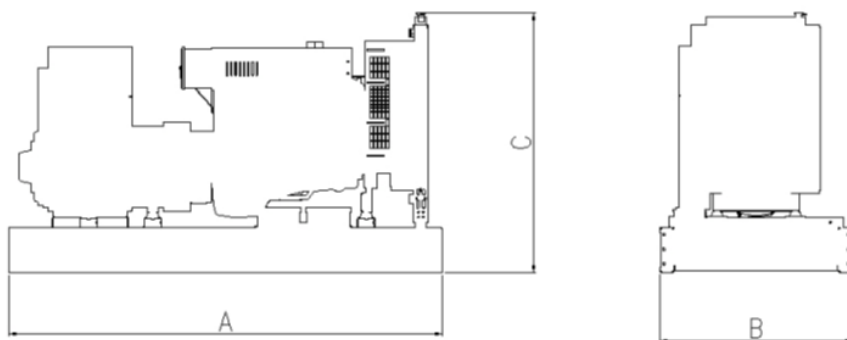
* Weights represent a set with standard features. See outline drawing for weights of other configurations.

Dimensions

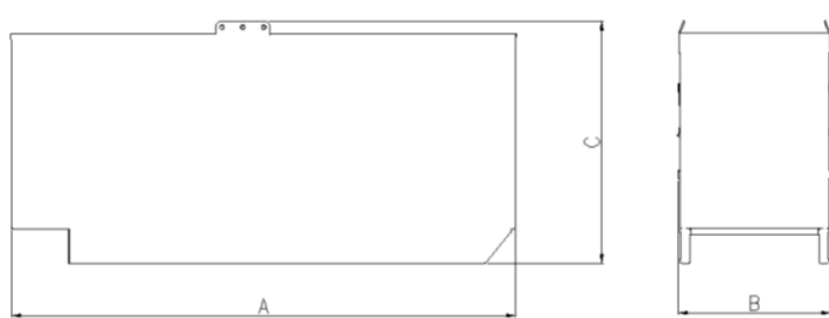
	Length	Width	Height
Standard open set dimensions	2268	1094	1576
Enclosed set standard dimensions	3151	1142	1714

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 ¹	Temp rise °C	Duty ²	Alternator	Voltage
Wye, 3 phase	150/125	S/P	UCI224G	220-240
Wye, 3 phase	150/125	S/P	UCI224G	380

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) 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

$$\frac{\text{kW} \times \text{Single Phase Factor} \times 1000}{\text{Voltage}}$$

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