

» Generator set data sheet



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Spec sheet:	DS353-CPGK
Noise data sheet (Open/enclosed):	ND50-CS550
Airflow data sheet:	AF50-550
Transient data sheet:	TD50-550

Fuel consumption	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	110 (88)				100 (80)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
gph	1.6	2.8	4.3	6.0	1.5	2.6	4.0	5.4
L/hr	7.4	12.9	19.4	27.2	6.8	12.0	18.0	24.7

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	6BTA5.9 G5	
Configuration	Inline 6-Cylinder Diesel	
Aspiration	Turbocharged and After Cooled	
Gross engine power output, kWm	102	93
BMEP at set rated load, kPa	1386	1265
Bore, mm	102	
Stroke, mm	120	
Rated speed, rpm	1500	
Piston speed, m/s	6	
Compression ratio	17.6:1	
Lube oil capacity, L	16.4	
Overspeed limit, rpm	1800	
Regenerative power, kW	8.0	
Governor type	Electronic	
Starting voltage	12V Volts DC	

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

Air	
Combustion air, m <sup>3</sup> /min	131.00   120.00
Maximum air cleaner restriction, kPa	6

<b>Exhaust</b>	<b>Standby rating</b>	<b>Prime rating</b>
Exhaust gas flow at set rated load, m <sup>3</sup> /min	21.4	19.5
Exhaust gas temperature, °C	540	533
Maximum exhaust back pressure, kPa	10.5	

<b>Standard set-mounted radiator cooling</b>		
Ambient design, °C	54	
Fan load, KW <sub>m</sub>	5.6	
Coolant capacity (with radiator), L	19.75	
Cooling system air flow, m <sup>3</sup> /sec @ 12.7mmH <sub>2</sub> O	3.44	
Total heat rejection, BTU/min	9259	8419
Maximum cooling air flow static restriction mmH <sub>2</sub> O	RTF	

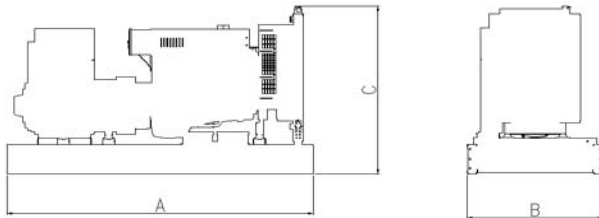
<b>Weights*</b>	<b>Open</b>	<b>Enclosed</b>
Unit dry weight kgs	1263	1963
Unit wet weight kgs	1574	2274

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

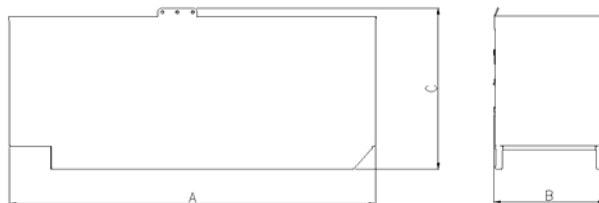
<b>Dimensions</b>	<b>Length</b>	<b>Width</b>	<b>Height</b>
Standard open set dimensions	2268	1094	1576
Enclosed set standard dimensions	3151	1142	1714

## 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

Feature code	Connection <sup>1</sup>	Temp rise degrees C	Duty <sup>2</sup>	Alternator	Voltage
0	Wye -3 phase	163/125	S/P	UC1274C	380-415
	0	0	0	0	0

### Ratings definitions

Emergency Standby Power (ESP)	Limited-Time running Power	Prime Power (PRP):	Base Load (Continuous) Power
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

$$\frac{kW \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$$

Single phase output

$$\frac{kW \times \text{SingleP haseFactor} \times 1000}{\text{Voltage}}$$