

Model: C180 D5  
 Frequency: 50Hz  
 Fuel Type: Diesel

## » Generator set data sheet

### 180 kVA Standby



Spec sheet:	SS6-CPGK
Noise data sheet (Open/enclosed):	ND50-OS550 / ND50-CS550
Airflow data sheet:	AF50-550
Derate data sheet (Open/enclosed):	DD50-OS550 / DD50-CS550
Transient data sheet:	TD50-550

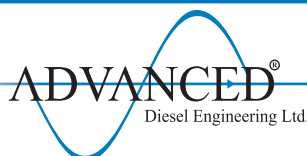
Fuel consumption	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	180 (144)				163.8 (131)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	2.2	4.0	5.9	8.8	2.2	4.2	5.9	7.9
L/hr	10	18	27	40	10	19	27	36

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	6ISBeG1	
Configuration	4 Cycle; In-line; 6 Cylinder Diesel	
Aspiration	Turbo Charged and Air to Air Aftercooled	
Gross engine power output, kWm	165	149
BMEP at set rated load, kPa	2228	2035
Bore, mm	102	
Stroke, mm	120	
Rated speed, rpm	1500	
Piston speed, m/s	6	
Compression ratio	16.5:1	
Lube oil capacity, L	17.5	
Overspeed limit, rpm	1800 ±50	
Regenerative power, kW	12.7	
Governor type	Electronic	
Starting voltage	12 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	95.4
Maximum fuel inlet restriction, mm Hg	102
Maximum fuel inlet temperature (°C)	60

Air	
Combustion air, m <sup>3</sup> /min	9.2
Maximum air cleaner restriction, kPa	6.2

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## Exhaust

	Standby rating	Prime rating
Exhaust gas flow at set rated load, m <sup>3</sup> /min	25.1	23
Exhaust gas temperature, °C	572	551
Maximum exhaust back pressure, kPa	10.2	

## Standard set-mounted radiator cooling

Ambient design, °C	56	
Fan load, KW <sub>m</sub>	9	
Coolant capacity (with radiator), L	9.9	
Cooling system air flow, m <sup>3</sup> /min @ 12.7mmH <sub>2</sub> O	5.5	
Total heat rejection, BTU/min	5672	5603
Maximum cooling air flow static restriction mmH <sub>2</sub> O	19.1	

## Open set derating factors kVA (kW)

Note: Standard open genset options running at 400V, 150m above sea level. For enclosed product derates, please refer to datasheet - DD50-CS550.

	27°C	40°C	45°C	50°C	55°C
Standby	178.6 (142.9)	178.9 (143.1)	177.3 (141.8)	175.8 (140.6)	167.5 (134)
Prime	162.4 (129.9)	162.6 (130.1)	161.1 (128.9)	159.8 (127.8)	152.3 (121.8)

## Weights\*

	Open	Enclosed
Unit dry weight kgs	1400	2084
Unit wet weight kgs	1444	2668

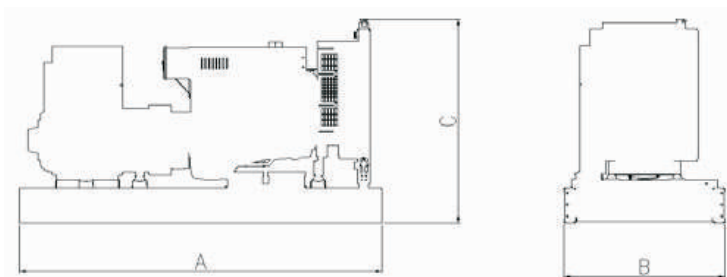
\* Weights represent a set with standard features. See outline drawing for weights of other configurations

## Dimensions

	Length	Width	Height
Standard open set dimensions	2404	1100	1487
Enclosed set standard dimensions	2920	1136	1710

## 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.

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## Alternator data

Feature code	Connection <sup>1</sup>	Temp rise degrees C	Duty <sup>2</sup>	Alternator	Voltage
B680	Wye, 3 Phase	150/125C	S/P	UC274G	380-415V

## 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

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

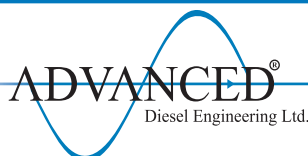
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