

» **Generator set data sheet**  
50kW Standby @ 60Hz



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<b>Spec sheet:</b>	<b>SS2-CPGK</b>
<b>Noise data sheet (Open/enclosed):</b>	<b>ND50-OS550 / ND50-CS550</b>
<b>Airflow data sheet:</b>	<b>AF50-550</b>
<b>Derate data sheet (Open/enclosed):</b>	<b>DD50-OS550 / DD50-CS550</b>
<b>Transient data sheet:</b>	<b>TD50-550</b>

<b>Fuel consumption</b>	<b>Standby</b>				<b>Prime</b>			
	<b>Kw (kVA)</b>				<b>Kw (kVA)</b>			
Ratings	50 (63)				45 (56)			
Load	<b>1/4</b>	<b>1/2</b>	<b>3/4</b>	<b>Full</b>	<b>1/4</b>	<b>1/2</b>	<b>3/4</b>	<b>Full</b>
gph	1.1	1.8	2.6	3.4	0.9	1.5	2.2	2.9
L/hr	5	8	12	16	4	7	10	13

<b>Engine</b>	<b>Standby rating</b>	<b>Prime rating</b>
Engine manufacturer	Cummins	
Engine model	4BT3.3G2	
Configuration	4 Cycle; In-line; 4 Cylinder Diesel	
Aspiration	Turbocharged	
Gross engine power output, kWm	61	54
BMEP at set rated load, kPa	1250	1097
Bore, mm	95	
Stroke, mm	115	
Rated speed, rpm	1800	
Piston speed, m/s	6.9	
Compression ratio	17:1	
Lube oil capacity, L	7	
Overspeed limit, rpm	2100 ±50	
Regenerative power, kW	4.5	
Governor type	Mechanical	
Starting voltage	12 Volts DC	

<b>Fuel flow</b>	
Maximum fuel flow, L/hr	17.2
Maximum fuel inlet restriction, mm Hg	73
Maximum fuel inlet temperature (°C)	60

<b>Air</b>	
Combustion air, m <sup>3</sup> /min	3.90
Maximum air cleaner restriction, kPa	6.2

<b>Exhaust</b>	<b>Standby rating</b>	<b>Prime rating</b>
Exhaust gas flow at set rated load, m <sup>3</sup> /min	10.1	9.2
Exhaust gas temperature, C	510	502
Maximum exhaust back pressure, kPa	10.2	

<b>Standard set-mounted radiator cooling</b>		
Ambient design, °C	55	
Fan load, KW <sub>m</sub>	1.2	
Coolant capacity (with radiator), L	9.1	
Cooling system air flow, m3/sec @ 12.7mmH2O	1.34	
Total heat rejection, BTU/min	2025	1785
Maximum cooling air flow static restriction mmH2O	12.7	

### 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.

	<b>27°C</b>	<b>40°C</b>	<b>45°C</b>	<b>50°C</b>	<b>55°C</b>
<b>Standby</b>	62.5 (50)	62.5 (50)	62.5 (50)	61.1 (48.9)	52.5 (42)
<b>Prime</b>	56.3 (45)	56.3 (45)	55.8 (44.6)	55.5 (44.4)	42.5 (34)

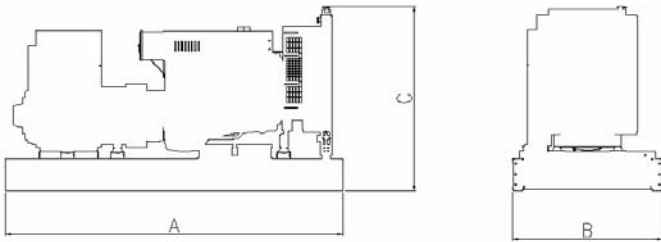
<b>Weights*</b>	<b>Open</b>	<b>Enclosed</b>
Unit dry weight kgs	711	1035
Unit wet weight kgs	776	1100

\* 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	1753	930	1256
Enclosed set standard dimensions	2244	969	1575

### 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
B766	Wye, 3 Phase	125/150C	S/P	UC224D	400-480V

## 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

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

Single phase output

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

See your distributor for more information.

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