



**Power  
Generation**

» Generator set data sheet

**Model:** C700 D5  
**Frequency:** 50  
**Fuel Type:** Diesel

<b>Spec sheet:</b>	SS12-CPGK
<b>Noise data sheet (Open/enclosed):</b>	ND50-OSHHP / ND50-CS550
<b>Airflow data sheet:</b>	AF50-HHP
<b>Derate data sheet (Open/enclosed):</b>	DD50-OSHHP / DD50-CSHHP
<b>Transient data sheet:</b>	TD50-HHP

<b>Fuel consumption</b>	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	706 (565)				640 (512)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
gph	10.8	17.6	25.1	33.8	9.5	16.0	22.9	30.8
L/hr	49.0	80.0	114.0	154.0	43.0	73.0	104.0	140.0

<b>Engine</b>	Standby Rating	Prime Rating
Engine manufacturer	Cummins	
Engine model	VTA28-G5	
Configuration	Cast Iron, 40° V12 Cylinder	
Aspiration	Turbo Charged and After-Cooled	
Gross engine power output, kWm	612	560
BMEP at set rated load, kPa	1751	1599
Bore, mm	140	
Stroke, mm	152	
Rated speed, rpm	1500	
Piston speed, m/s	7.6	
Compression ratio	13.1:1	
Lube oil capacity, L	83	
Overspeed limit, rpm	1850 ±50	
Regenerative power, kW	75	
Governor type	Electronic	
Starting voltage	24 Volts DC	

<b>Fuel flow</b>	
Maximum fuel flow, L/hr	337
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature (°C)	70

<b>Air</b>	<b>Standby Rating</b>	<b>Prime Rating</b>
Combustion air, m <sup>3</sup> /min	52.60	49.50
Maximum air cleaner restriction, kPa	6.2	

<b>Exhaust</b>		
Exhaust gas flow at set rated load, m <sup>3</sup> /min	122.8	119.1
Exhaust gas temperature, °C	507.2	493.3
Maximum exhaust back pressure, kPa	10.2	

<b>Standard set-mounted radiator cooling</b>		
Ambient design, °C	40	
Fan load, KW <sub>m</sub>	19.6	
Coolant capacity (with radiator), L	125	
Cooling system air flow, m <sup>3</sup> /sec @ 12.7mmH <sub>2</sub> O	12.45	
Total heat rejection, BTU/min	21610	19310
Maximum cooling air flow static restriction mmH <sub>2</sub> O	19.1	

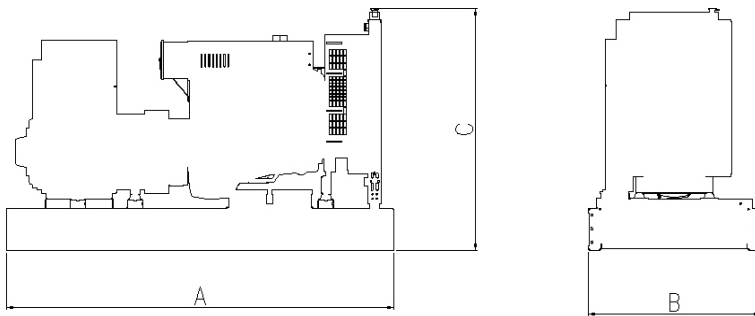
<b>Weights*</b>	<b>Open</b>	<b>Enclosed</b>
Unit dry weight kgs	5491	RTF
Unit wet weight kgs	5760	RTF

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

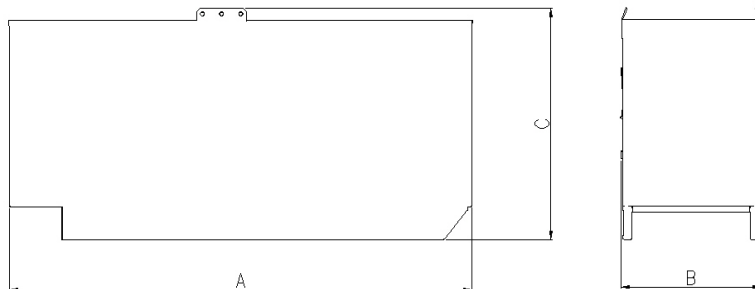
<b>Dimensions</b>	<b>Length</b>	<b>Width</b>	<b>Height</b>
Standard open set dimensions	4047	1608	1942
Enclosed set standard dimensions	RTF	RTF	RTF

### 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 <sup>1</sup>	Temp rise °C	Duty <sup>2</sup>	Alternator	Voltage
Wye, 3 Phase	150/125C	S/P	HC6G	380-440V
Wye, 3 Phase	150/125C	S/P	HC5F	380-415V

## 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

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

Single phase output

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