

Model: 660 DFGD  
 Frequency: 50  
 Fuel Type: Diesel

» Generator set data sheet  
 825 kVA Standby



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

Fuel consumption	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	825 (660)				750 (600)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	8.8	17.8	26.6	35.6	7.9	16.0	24.2	32.3
L/hr	40	81	121	162	36	73	110	147

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	VTA28-G6	
Configuration	Cast Iron, 40° V12 Cylinder	
Aspiration	Turbo Charged and After-Cooled	
Gross engine power output, kW/m	722	656
BMEP at set rated load, kPa	2062	1874
Bore, mm	139.7	
Stroke, mm	139.7	
Rated speed, rpm	1500	
Piston speed, m/s	7.6	
Compression ratio	13:1	
Lube oil capacity, L	83	
Overspeed limit, rpm	1850 ±50	
Regenerative power, kW	75	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	448
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature (°C)	60

Air	
Combustion air, m³/min	55
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	132	120
Exhaust gas temperature, °C	489	464
Maximum exhaust back pressure, kPa	10.1	

<b>Standard set-mounted radiator cooling</b>		
Ambient design, °C	50	
Fan load, KW <sub>m</sub>	19	
Coolant capacity (with radiator), L	162	
Cooling system air flow, m <sup>3</sup> /min @ 12.7mmH <sub>2</sub> O	12.45	
Total heat rejection, BTU/min	32700	27795
Maximum cooling air flow static restriction mmH <sub>2</sub> O	25.4	

### 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-CSHHP.

	<b>27°C</b>	<b>40°C</b>	<b>45°C</b>	<b>50°C</b>	<b>55°C</b>
<b>Standby</b>	825 (660)	825 (660)	825 (660)	RTF	RTF
<b>Prime</b>	750 (600)	750 (600)	750 (600)	RTF	RTF

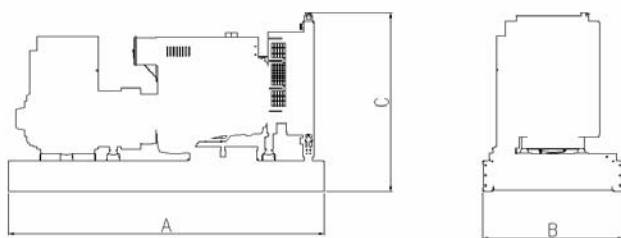
<b>Weights*</b>	<b>Open</b>	<b>Enclosed</b>
Unit dry weight kgs	5771	RTF
Unit wet weight kgs	6040	RTF

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

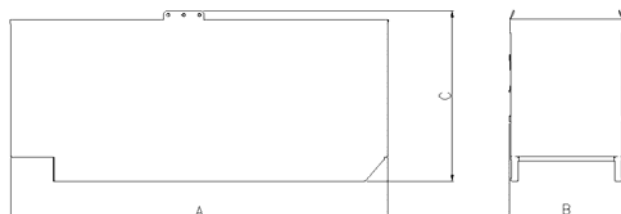
<b>Dimensions</b>	<b>Length</b>	<b>Width</b>	<b>Height</b>
Standard open set dimensions	4047	1608	2187
Enclosed set standard dimensions	RTF	RTF	RTF

### 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

Feature code	Connection <sup>1</sup>	Temp rise degrees C	Duty <sup>2</sup>	Alternator	Voltage
B729	Wye, 3 Phase	150/125C	S/P	HC6G	380-440V

## 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

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

See your distributor for more information.

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