

Model: 603 DFGB
 Frequency: 60
 Fuel Type: Diesel

» Generator set data sheet
 753.8 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			
	Kw (kVA)				Kw (kVA)			
Ratings	603 (753.8)				545 (681.3)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	12.0	20.0	28.5	38.0	11.0	18.5	25.9	33.8
L/hr	55	91	130	173	50	84	118	154

Engine	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, kW/m	671	608
BMEP at set rated load, kPa	1599	1448
Bore, mm	140	
Stroke, mm	152	
Rated speed, rpm	1800	
Piston speed, m/s	9.1	
Compression ratio	13.1:1	
Lube oil capacity, L	83	
Overspeed limit, rpm	2100 ±50	
Regenerative power, kW	75	
Governor type	Electronic	
Starting voltage	24 Volts DC	

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

Air	
Combustion air, m³/min	64.6 58.5
Maximum air cleaner restriction, kPa	6.2



Exhaust	Standby rating	Prime rating
Exhaust gas flow at set rated load, m ³ /min	142.8	131.5
Exhaust gas temperature, °C	502	474
Maximum exhaust back pressure, kPa	10.2	

Standard set-mounted radiator cooling		
Ambient design, °C	50	
Fan load, KW _m	19.6	
Coolant capacity (with radiator), L	125	
Cooling system air flow, m ³ /min @ 12.7mmH ₂ O	17.8	
Total heat rejection, BTU/min	26065	20985
Maximum cooling air flow static restriction mmH ₂ 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.

	27°C	40°C	45°C	50°C	55°C
Standby	706.3 (565)	706.3 (565)	688.8 (551)	667.5 (534)	RTF
Prime	640 (512)	640 (512)	626.3 (501)	606.3 (485)	RTF

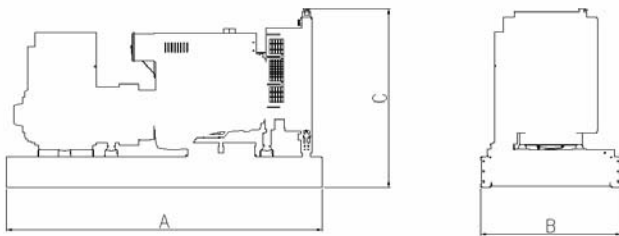
Weights*	Open	Enclosed
Unit dry weight kgs	5396	RTF
Unit wet weight kgs	5665	RTF

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

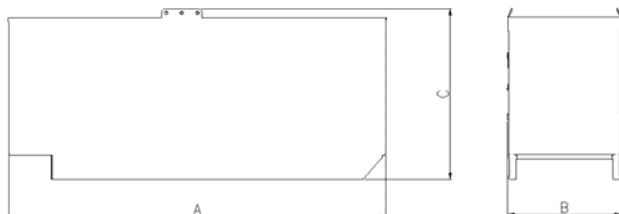
Dimensions	Length	Width	Height
Standard open set dimensions	4047	1608	1942
Enclosed set standard dimensions	RTF	RTF	RTF

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

Feature code	Connection ¹	Temp rise degrees C	Duty ²	Alternator	Voltage
B769	Wye, 3 Phase	125/150C	S/P	HC6G	380-480V
B682	Wye, 3 Phase	150/125C	S/P	HC5F	416-480V

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

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

See your distributor for more information.

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