

Model: 833 DFHC
 Frequency: 50
 Fuel Type: Diesel

» Generator set data sheet
 1041kVA Standby @ 50Hz



Our energy working for you.™

Spec sheet:	SS13-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	1041 (833)				939 (751)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
gph	12.0	21.5	32.9	44.8	11.2	20.7	30.5	40.4
L/hr	54	98	150	204	51	94	139	184

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	QST30-G3	
Configuration	Cast Iron, 50° V12 Cylinder	
Aspiration	Turbo Charged and After-Cooled	
Gross engine power output, kWm	895	806
BMEP at set rated load, kPa	2358	2117
Bore, mm	140	
Stroke, mm	165.1	
Rated speed, rpm	1500	
Piston speed, m/s	8.3	
Compression ratio	14:1	
Lube oil capacity, L	133	
Overspeed limit, rpm	2100 ±50	
Regenerative power, kW	78	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	550
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature (°C)	66

Air	
Combustion air, m ³ /min	56.20 51.80
Maximum air cleaner restriction, kPa	6.2



Exhaust

	Standby rating	Prime rating
Exhaust gas flow at set rated load, m ³ /min	163	146
Exhaust gas temperature, C	563	541
Maximum exhaust back pressure, kPa	10.2	

Standard set-mounted radiator cooling

Ambient design, °C	40	
Fan load, KW _m	18.6	
Coolant capacity (with radiator), L	84	
Cooling system air flow, m3/sec @ 12.7mmH2O	15.5	
Total heat rejection, BTU/min	22970	21200
Maximum cooling air flow static restriction mmH2O	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	1041.3 (833)	1041.3 (833)	1041.3 (833)	1041.3 (833)	RTF
Prime	938.8 (751)	938.8 (751)	938.8 (751)	938.8 (751)	RTF

Weights*

	Open	Enclosed
Unit dry weight kgs	6117	RTF
Unit wet weight kgs	6296	RTF

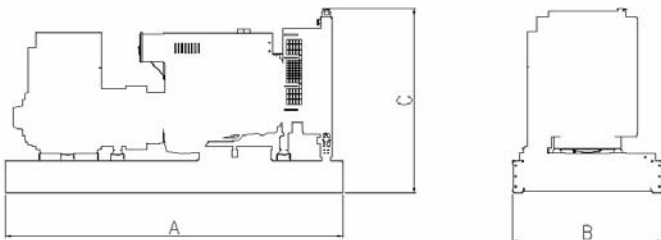
* Weights represent a set with standard features. See outline drawing for weights of other configurations

Dimensions

	Length	Width	Height
Standard open set dimensions	4297	1685	2079
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
B729	Wye, 3 Phase	150/125C	S/P	HC6J	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

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

See your distributor for more information.

Cummins Power Generation
 Manston Park, Columbus Avenue
 Manston, Ramsgate
 Kent CT12 5BF, UK
 Telephone: +44 (0) 1843 255000
 Fax: +44 (0) 1843 255902
 E-Mail: cpg.uk@cummins.com
 Web: www.cumminspower.com