# **Generator set data sheet**



Model: C825 D5
Frequency: 50 Hz
Fuel type: Diesel

Spec sheet:	SS12-CPGK
Sound Data Sheet	MSP-3098
Cooling System Data	MCP-2045

	Standb	Standby			Prime			
Fuel consumption	kVA (kV	kVA (kW)			kVA (kV	V)		
Ratings	825 (66	825 (660)			750 (600)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	13.2	22.7	32.8	43.6	12.4	20.9	30.0	39.6
L/hr	50.1	86.0	124.2	165.2	46.8	79.2	113.5	150.1

Engine	Standby rating	Prime rating		
Engine manufacturer	Cummins			
Engine model	QSK23-G3			
Configuration	Cast iron, in-line 6 cylir	nder		
Aspiration	Turbocharged and afte	r-cooled		
Gross engine power output, kWm	768	701		
BMEP at set rated load, kPa	2427	2268		
Bore, mm	170			
Stroke, mm	170			
Rated speed, rpm	1500	1500		
Piston speed, m/s	8.6			
Compression ratio	16:1			
Lube oil capacity, L	103			
Overspeed limit, rpm	1800 ±50			
Regenerative power, kW	72	72		
Governor type	Electronic	Electronic		
Starting voltage	24 Volts DC			

# **Fuel flow**

Maximum fuel flow, L/hr	684
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature, °C	70

Air	Standby rating	Prime rating
Combustion air, m³/min	53.3	48.7
Maximum air cleaner restriction, kPa	6.2	

#### **Exhaust**

Exhaust gas flow at set rated load, m <sup>3</sup> /min	147.78	135.54
Exhaust gas temperature, °C	543	532
Maximum exhaust back pressure, kPa	10.1	

#### Standard set-mounted radiator cooling

Ambient design, °C	40	
Fan load, kW <sub>m</sub>	14.4	
Coolant capacity (with radiator), L	103	
Cooling system air flow, m³/sec @ 12.7 mm H <sub>2</sub> O	11.6	11.6
Total heat rejection, Btu/min	23265	18612
Maximum cooling air flow static restriction mm H <sub>2</sub> O	25.4	25.4

# **Optional set-mounted radiator cooling**

Ambient design, °C	50	
Fan load, kW <sub>m</sub>	14.4	
Coolant capacity (with radiator), L	103	
Cooling system air flow, m³/sec @ 12.7 mm H <sub>2</sub> O	11.6	11.6
Total heat rejection, Btu/min	23265	18612
Maximum cooling air flow static restriction mm H <sub>2</sub> O	25.4	25.4

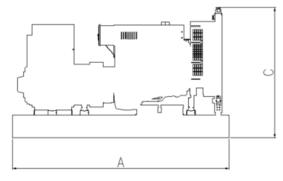
Weights*	Open	Enclosed
Unit dry weight kgs	6219	N/A
Unit wet weight kgs	6371	N/A

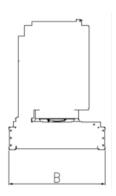
<sup>\*</sup> Weights represent a set with standard features. See outline drawing for weights of other configurations.

Dimensions	Length	Width	Height
Standard open set dimensions mm	4318	1856	2148
Enclosed set standard dimensions mm	N/A	N/A	N/A

#### **Genset outline**

#### Open set





Outlines are for illustrative purposes only. Please refer to the genset outline drawing for an exact representation of this model.

#### **Alternator data**

Connection	Temp rise °C	Duty	Alternator	Voltage
Wye, 3-phase	163	S/P	HCI6G	380-440 V
Wye, 3-phase	105*	Р	HCI6G	380-440 V

<sup>\*</sup>Option available only through ETO (Engineering to Order)

#### **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) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

### Formulas for calculating full load currents:

Three phase output	Single phase output
kW x 1000	kW x SinglePhaseFactor x 1000
Voltage x 1.73 x 0.8	Voltage

For more information contact your local Cummins distributor or visit power.cummins.com

