

Generator set data sheet



Model: C1100 D5B
Frequency: 50 Hz
Fuel type: Diesel

Spec sheet:	SS15-CPGK
Noise data sheet (open/enclosed):	MSP-2039
Airflow data sheet:	MCP-1039

Fuel consumption	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	1132 (906)				1029 (823)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	25	33	44	59	17	30	43	55
L/hr	95	127	169	225	65	113	161	208

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	KTA38-G14	
Configuration	Cast iron, 60° V12 cylinder	
Aspiration	Turbocharged and after-cooled	
Gross engine power output, kWm	950	860
BMEP at set rated load, kPa	2055	1868
Bore, mm	159	
Stroke, mm	159	
Rated speed, rpm	1500	
Piston speed, m/s	7.9	
Compression ratio	13.9:1	
Lube oil capacity, L	161	
Overspeed limit, rpm	1850 ±50	
Regenerative power, kW	86	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	428
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature, °C	70

Air	Standby rating	Prime rating
Combustion air, m ³ /min	72.80	68.40
Maximum air cleaner restriction, kPa	6.2	

Exhaust		
Exhaust gas flow at set rated load, m ³ /min	198.5	183.0
Exhaust gas temperature, °C	513	499
Maximum exhaust back pressure, kPa	10	

Standard set-mounted radiator cooling		
Ambient design, °C	40	
Fan load, kWm	20	
Coolant capacity (with radiator), L	275	
Cooling system air flow, m ³ /sec @ 12.7 mm H ₂ O	15	
Total heat rejection, Btu/min	33800	30680
Maximum cooling air flow static restriction mm H ₂ O	25.4	

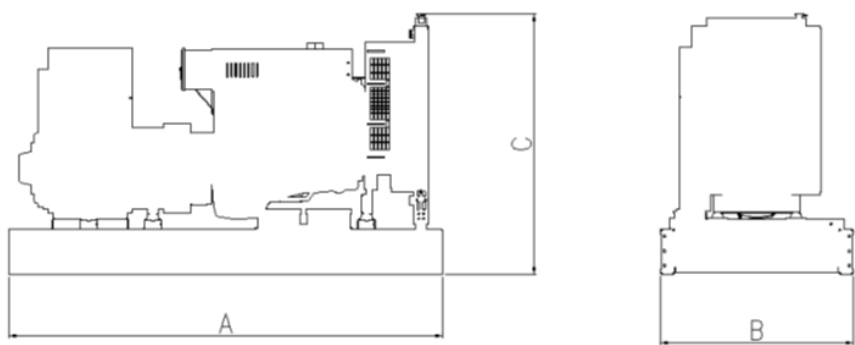
Weights*	Open	Enclosed
Unit dry weight kgs	7990	RTF
Unit wet weight kgs	8380	RTF

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

Dimensions	Length	Width	Height
Standard open set dimensions mm	4470	1785	2229
Enclosed set standard dimensions mm	RTF	RTF	RTF

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	150/125	S/P	HC16K	380-480 V
Wye, 3-phase	105*	P	HC16K	380-480 V

*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

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

Single phase output

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