

Generator set data sheet



Model: C825 D5A
Frequency: 50 Hz
Fuel type: Diesel

Spec sheet:	SS13-CPGK
Noise data sheet (open/enclosed):	ND50-OSHHP/ND50-CS550
Cooling system data:	MCP-1035

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	13.2	23.9	36.7	51.3	7.9	16.0	24.2	32.3
L/hr	50	91	140	195	36	73	110	147

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	VTA28-G6	
Configuration	Cast iron, 40° V12 cylinder	
Aspiration	Turbocharged and after-cooled	
Gross engine power output, kW _m	733	656
BMEP at set rated load, kPa	2062	1874
Bore, mm	140	
Stroke, mm	152	
Rated speed, rpm	1500	
Piston speed, m/s	7.6	
Compression ratio	13:1	
Lube oil capacity, L	83	
Overspeed limit, rpm	1725 ±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	70

Air	Standby rating	Prime rating
Combustion air, m ³ /min	54.8	49.0
Maximum air cleaner restriction, kPa	6.2	

Exhaust

Exhaust gas flow at set rated load, m ³ /min	132.7	120.0
Exhaust gas temperature, °C	489	464
Maximum exhaust back pressure, kPa	10.1	

Standard set-mounted radiator cooling

Ambient design, °C	40	
Fan load, kW _m	19.6	
Coolant capacity (with radiator), L	182	
Cooling system air flow, m ³ /sec @ 12.7 mm H ₂ O	14.5	
Total heat rejection, Btu/min	32700	27795
Maximum cooling air flow static restriction, mm H ₂ O	25.4	

Weights*

	Open	Enclosed
Unit dry weight, kgs	5645	RTF
Unit wet weight, kgs	5844	RTF

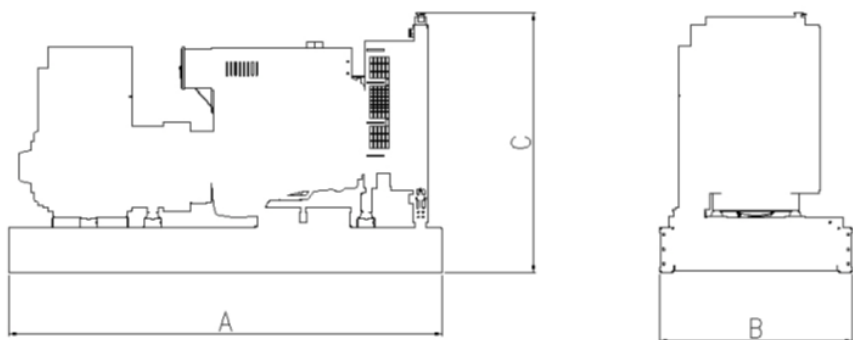
* Weights represent a set with standard features. See outline drawing for weights of other configurations.

Dimensions

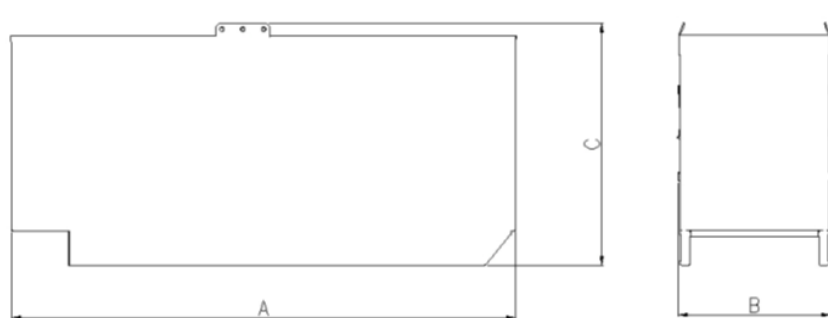
	Length	Width	Height
Standard open set dimensions, mm	4047	1609	2179
Enclosed set standard dimensions, mm	RTF	RTF	RTF

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

Connection	Temp rise °C	Duty	Alternator	Voltage
Wye, 3-phase	150/125	S/P	HC6G	380-440

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

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