Generator set data sheet





Model: C90 D5 (6B)

Frequency: 50

Fuel type: Diesel

Spec sheet:	SS28-CPGK
Noise data sheet (open/enclosed):	ND50-CS550
Airflow data sheet:	AF50-550
Derate data sheet (open/enclosed):	TBD
Transient data sheet:	TD50-550

	Standb	Standby kVA (kW)			Prime	Prime		
Fuel consumption	kVA (k				kVA (kW)			
Ratings	90 (72)				82 (65.	6)		
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
gph	1.4	2.5	3.8	5.2	1.3	2.3	3.4	4.7
L/hr	6.2	11.5	17.1	23.6	5.7	10.3	15.4	21.2

Engine	Standby rating	Prime rating		
Engine manufacturer	Cummins	•		
Engine model	6BTA5.9 G5			
Configuration	Inline 6-Cylinder diesel			
Aspiration	Turbocharged and after	r-cooled		
Gross engine power output, kWm	102	93		
BMEP at set rated load, kPa	1386	1265		
Bore, mm	102			
Stroke, mm	120			
Rated speed, rpm	1500	1500		
Piston speed, m/s	6	6		
Compression ratio	17.6:1			
Lube oil capacity, L	16.4			
Overspeed limit, rpm	1800			
Regenerative power, kW	6.5454545	6.545454545		
Governor type	Electronic	Electronic		
Starting voltage	12 Volts DC			

Fuel flow

Maximum fuel flow, L/hr	45
Maximum fuel inlet restriction, mm Hg	8
Maximum fuel inlet temperature, (°C)	71

Air	Standby rating	Prime rating
Combustion air, m³/min	7.86	7.2
Maximum air cleaner restriction, kPa	6	

Exhaust

Exhaust gas flow at set rated load, m³/min	21.4	19.5
Exhaust gas temperature, °C	540	533
Maximum exhaust back pressure, kPa	10.5	

Standard set-mounted radiator cooling

Ambient design, °C	54	
Fan load, kW _m	5.60992	
Coolant capacity (with radiator), L	19.75	
Cooling system air flow, m³/sec @ 12.7mm H ₂ O	3.44	
Total heat rejection, BTU/min	9259	8419
Maximum cooling air flow static restriction, mm H ₂ O	12.7	

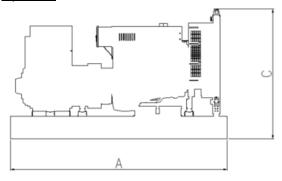
Weights*	Open	Enclosed
Unit dry weight, kgs	1244	1944
Unit wet weight, kgs	1555	2255

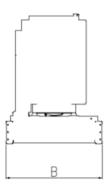
^{*} Weights represent a set with standard features. See outline drawing for weights of other configurations.

Dimensions	Length	Width	Height
Standard open set dimensions	2268	1094	1576
Enclosed set standard dimensions	3151	1142	1714

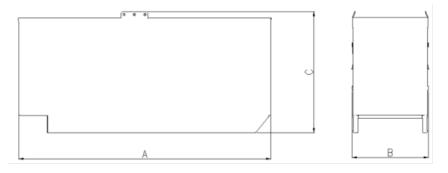
Genset outline

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 ¹	Temp rise °C	Duty ²	Alternator	Voltage
Wye, 3 phase	163/125	S/P	UCI224G	380-415

Ratings definitions

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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) 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 Single Phase Factor x 1000

Voltage x 1.73 x 0.8 Voltage



Lisburn Enterprise Centre 6 Enterprise Crescent Ballinderry Road, Lisburn Co. Antrim, BT28 2BP

T: +44 (0)28 92 636858 E: info@pmpower.com www.pmpower.com

