Generator set data sheet

Model: C22 D5 (X-Series)
Frequency: 50 Hz
Fuel type: Diesel

Spec sheet:	SS26-CPGK
Noise data sheet (open/enclosed):	ND50-OS550/ND50-CS550
Airflow data sheet:	AF50-550
Derate data sheet (open/enclosed):	DD50-OS550/DD50-CS550
Transient data sheet:	TD50-550

Fuel consumption

	Standby				**Prime**			
	kVA (kW)				**kVA (kW)**			
Ratings	22 (18)				20 (16)			
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**
gph	0.7	0.9	1.2	1.5	0.7	0.8	1.1	1.4
L/hr	2.5	3.4	4.4	5.6	2.5	3.2	4.1	5.2

Engine

	Standby rating	**Prime rating**
Engine manufacturer	Cummins	
Engine model	X2.5G2	
Configuration	4 cycle; In-line; 3 cylinder diesel	
Aspiration	Naturally aspirated	
Gross engine power output, kWm	27	24.37
BMEP at set rated load, kPa	863.9	779.8
Bore, mm	91.4	
Stroke, mm	127	
Rated speed, rpm	1500	
Piston speed, m/s	6.35	
Compression ratio	18.5:1	
Lube oil capacity, L	7.3	
Overspeed limit, rpm	1725	
Regenerative power, kW	2	
Governor type	Mechanical - Std	
Starting voltage	12 Volts DC	

Fuel flow

Maximum fuel flow, L/hr	40
Maximum fuel inlet restriction, mm Hg	73.66
Maximum fuel inlet temperature, ℃	60

Air	Standby rating	Prime rating
Combustion air, m^3/min	2.30	2.30
Maximum air cleaner restriction, kPa	4	

Exhaust

Exhaust gas flow at set rated load, m^3/min		
Exhaust gas temperature, ℃	660	660
Maximum exhaust back pressure, kPa	3.38	

Standard set-mounted radiator cooling

Ambient design, ℃	50	
Fan load, kW_m	0.95	
Coolant capacity (with radiator), L	15	
Cooling system air flow, m^3/sec @ 12.7 mm H_2O	0.78	
Total heat rejection, Btu/min	882	
Maximum cooling air flow static restriction, mm H_2O		

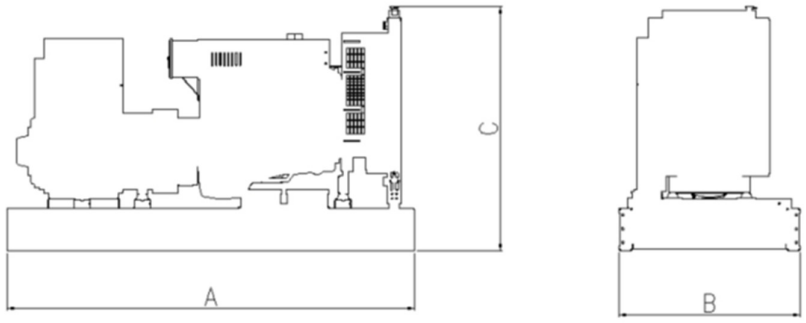
Weights*	Open	Enclosed
Unit dry weight, kgs	650.5	970.5
Unit wet weight, kgs	672.5	992.5

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

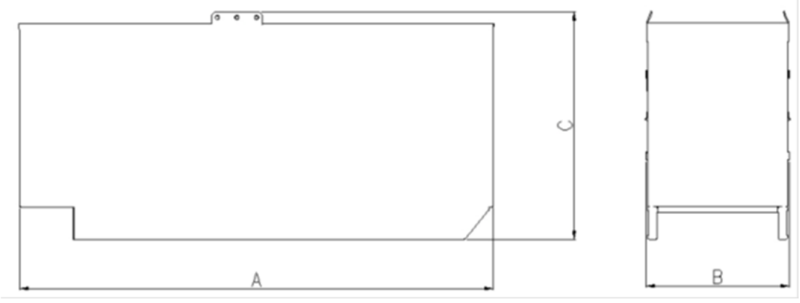
Dimensions	Length	Width	Height
Standard open set dimensions, mm	1667	930	1282
Enclosed set standard dimensions, mm	2082	987	1524

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 ºC	Duty[2]	Alternator	Voltage
3 phase	163/125	S/P	S0L2-G1	400-416 V
3 phase	163/125	S/P	S0L2-M1	380 V
3 phase	125/105	S/P	S0L2-M1	380-416 V
1 phase	125/105	S/P	S0L2-U1	230 V

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 and DIN 6271.	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 and DIN 6271.	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 and DIN 6271.

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

$$\frac{\text{kW} \times \text{Single Phase Factor} \times 1000}{\text{Voltage}}$$

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

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DS340-CPGK (8/18)