

## Generator set data sheet

**Model:** C400D5  
**Frequency:** 50 Hz  
**Fuel type:** Diesel

<b>Spec sheet:</b>	SS11-CPGK
<b>Noise data sheet (open):</b>	ND50-OS550/ND50-CS550
<b>Airflow data sheet:</b>	AF50-550
<b>Derate data sheet (open):</b>	DD50-OS550/DD50-CS550
<b>Transient data sheet:</b>	TD50-550

Fuel consumption	Standby				Prime			
	kVA (kW)				kVA (kW)			
<b>Ratings</b>	400(320)				360(288)			
<b>Load</b>	<b>1/4</b>	<b>1/2</b>	<b>3/4</b>	<b>Full</b>	<b>1/4</b>	<b>1/2</b>	<b>3/4</b>	<b>Full</b>
<b>US gph</b>	5.7	10.7	15.7	21.5	5.2	9.7	14.2	19
<b>L/hr</b>	21.6	40.5	59.5	82	20	37	54	72

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	QSG12-G1	
Configuration	Cast iron, 6 cylinder	
Aspiration	Turbocharged and after cooled	
Gross engine power output, kWm	369	332
BMEP at set rated load, kPa	2503	2248
Bore, mm	132	
Stroke, mm	144	
Rated speed, rpm	1500	
Piston speed, m/s	7.2	
Compression ratio	17:1	
Lube oil capacity, L	34.1	
Overspeed limit, rpm	1725	
Regenerative power, kW	36	
Governor type	Electronic	
Starting voltage	24V Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	182
Maximum fuel inlet restriction, mm Hg (clean filter)	304.8
Maximum fuel inlet temperature, °C	71

Air	Standby rating	Prime rating
Combustion air, L/sec	378	362
Maximum air cleaner restriction, kPa	6.2 (Dirty HD AC)	

Exhaust	
Exhaust gas flow at set rated load, L/sec	909
Exhaust gas temperature, °C	507
Maximum exhaust back pressure, kPa	10.2

## Standard set-mounted radiator cooling

Ambient design, °C	50	
Fan load, kWm	14.08	
Coolant capacity (with radiator), L	48	
Cooling system air flow, m3/sec @ 12.7 mmH2O	7.15	
Total heat rejection, kW	188	170
Maximum cooling air flow static restriction kPa	0.125	

## Weights\*

	Open	Enclosed
Unit dry weight kgs	3086	4406
Unit wet weight kgs	3769	5136

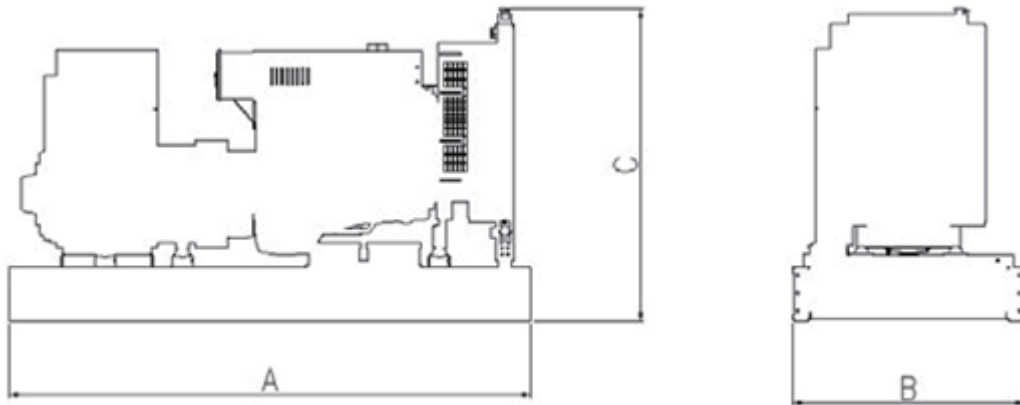
\* Weights represent a set with standard features. See outline drawing for weights of other configurations.

## Dimensions

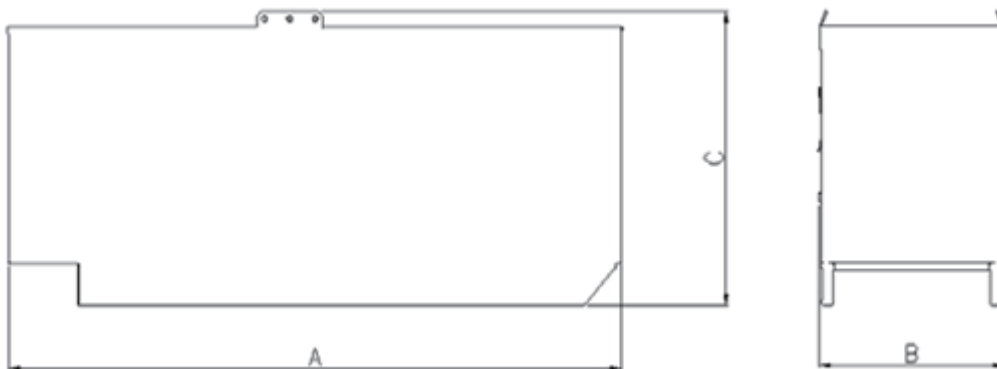
	Length	Width	Height
Standard open set dimensions mm	3686	1100	2180
Enclosed set standard dimensions mm	5093	1564	2375

## 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	150/125/105C	S/P	S4F	190-220V & 380-440V

## 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

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