Generator set data sheet



Model: C400D5 Frequency: 50 Hz Fuel type: Diesel

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

Fuel consumption	Standby			Prime				
	kVA (kW)		kVA (kW)					
Ratings	400(320)	400(320)			360 (288)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	5.7	10.7	15.7	21.5	5.2	9.7	14.2	19
L/hr	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 aft	er cooled		
Gross engine power output, kWm	369	332		
BMEP at set rated load, kPa	2503	2248		
Bore, mm	132	132		
Stroke, mm	144	144		
Rated speed, rpm	1500	1500		
Piston speed, m/s	7.2	7.2		
Compression ratio	17:1			
Lube oil capacity, L	34.1			
Overspeed limit, rpm	1725	1725		
Regenerative power, kW	36	36		
Governor type	Electronic	Electronic		
Starting voltage	24V Volts DC	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	824
Exhaust gas temperature, °C	507	457
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		

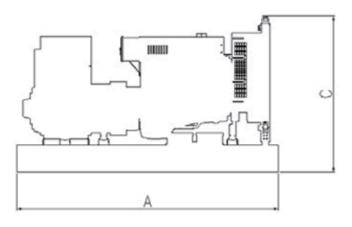
Weights*	Open	Enclosed
Unit dry weight kgs	3086	4406
Unit wet weight kgs	3769	5136

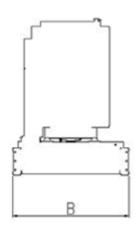
^{*} Weights represent a set with standard features. See outline drawing for weights of other configurations.

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

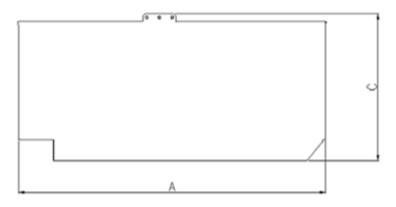
Genset outline

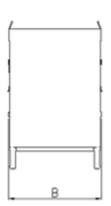
Open set





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 ^o 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

Single phase output

kW x 1000

kW x Single Phase Factor x 1000

Voltage x 1.73 x 0.8 Voltage

See your distributor for more information.

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