

» Generator set data sheet



**Power
Generation**

Our energy working for you.™

Spec sheet:	SS19-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)			
3-Phase Ratings	38 (30.4)				35 (28)			
1-Phase Ratings	30 (30)				27 (27)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
gph	0.8	1.1	1.6	2.3	0.6	0.9	1.3	1.9
L/hr	4	5	7	10	3	4	6	9

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	X 3.3 G1	
Configuration	4 Cycle; In-line; 4 Cylinder Diesel	
Aspiration	Naturally Aspirated	
Gross engine power output, kWm	36	32
BMEP at set rated load, kPa	804	757
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	6.5	
Overspeed limit, rpm	1725 ±25	
Regenerative power, kW	2.8	
Governor type	Mechanical	
Starting voltage	12 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	40
Maximum fuel inlet restriction, mm Hg	73
Maximum fuel inlet temperature (°C)	60

Air	
Combustion air, m ³ /min	1.90
Maximum air cleaner restriction, kPa	2.5

Exhaust

	Standby rating	Prime rating
Exhaust gas flow at set rated load, m ³ /min	2.3	2.3
Exhaust gas temperature, C	600	550
Maximum exhaust back pressure, kPa	4.75	

Standard set-mounted radiator cooling

Ambient design, °C	50	
Fan load, KW _m	0.9	
Coolant capacity (with radiator), L	9.6	
Cooling system air flow, m ³ /sec @ 12.7mmH ₂ O	106	
Total heat rejection, BTU/min	1653	1539
Maximum cooling air flow static restriction mmH ₂ O	0.3	

Open set derating factors kVA (kW)

Note: Standard open genset options running at 400V, 150m above sea level. For enclosed product derates, please refer to datasheet - DD50-CS550.

	27°C	40°C	45°C	50°C	55°C
Standby	38 (30.4)	37.3 (29.8)	36.5 (29.2)	34.3 (27.4)	33.5 (26.8)
Prime	33.9 (27.1)	33.1 (26.5)	32.5 (26)	31.8 (25.4)	31.1 (24.9)

Weights*

	Open	Enclosed
Unit dry weight kgs	745	1105
Unit wet weight kgs	910	1270

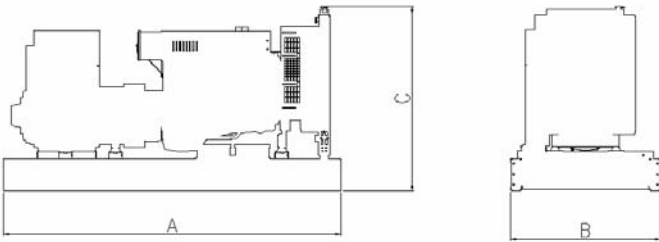
* Weights represent a set with standard features. See outline drawing for weights of other configurations

Dimensions

	Length	Width	Height
Standard open set dimensions	1753	930	1250
Enclosed set standard dimensions	2242	967	1513

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

Feature code	Connection ¹	Temp rise degrees C	Duty ²	Alternator	Voltage
TBC	Wye, 3 Phase	163/125	S/P	PI144H	380-440V

Ratings definitions

Emergency Standby Power (ESP)	Limited-Time running Power	Prime Power (PRP):	Base Load (Continuous) Power
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

$$\frac{kW \times 1000}{Voltage \times 1.73 \times 0.8}$$

Single phase output

$$\frac{kW \times SingleP \text{ haseFactor} \times 1000}{Voltage}$$