Model: C275 D5
Frequency: 50Hz
Fuel Type: Diesel

» Generator set data sheet
275 kVA Standby

ADVANCED® Diesel Engineering Ltd.

Spec sheet:	**SS8-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	275 (220)				250 (200)			
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**
US gph	3.7	6.6	10.1	13.7	3.1	5.7	8.4	11.5
L/hr	17	30	46	63	14	26	38	53

Engine	**Standby rating**	**Prime rating**
Engine manufacturer	Cummins	
Engine model	QSL9 G5	
Configuration	4 Cycle; In-line; 6 Cylinder Diesel	
Aspiration	Turbo Charged and Charge Air Cooled	
Gross engine power output, kWm	310	268
BMEP at set rated load, kPa	2785	2413
Bore, mm	114	
Stroke, mm	145	
Rated speed, rpm	1500	
Piston speed, m/s	7.2	
Compression ratio	16.8:1	
Lube oil capacity, L	26.5	
Overspeed limit, rpm	1800 ±50	
Regenerative power, kW	47	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	165
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature (°C)	70

Air		
Combustion air, m^3/min	20.3	18.7
Maximum air cleaner restriction, kPa	6.2	

Tel: +44(0)1977 658 100
Fax: +44(0)1977 608 111

Exhaust	Standby rating	Prime rating
Exhaust gas flow at set rated load, m^3/min	53	44.9
Exhaust gas temperature, °C	560	500
Maximum exhaust back pressure, kPa	10.2	

Standard set-mounted radiator cooling		
Ambient design, °C	50	
Fan load, KW_m	10	
Coolant capacity (with radiator), L	15	
Cooling system air flow, m3/min @ 12.7mmH2O	7.93	
Total heat rejection, BTU/min	10190	8415
Maximum cooling air flow static restriction mmH2O	19.1	

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	275 (220)	265 (212)	257 (205.6)	249.1 (199.3)	241.1 (192.9)
Prime	250 (200)	240.9 (192.7)	233.6 (186.9)	226.5 (181.2)	219.3 (175.4)

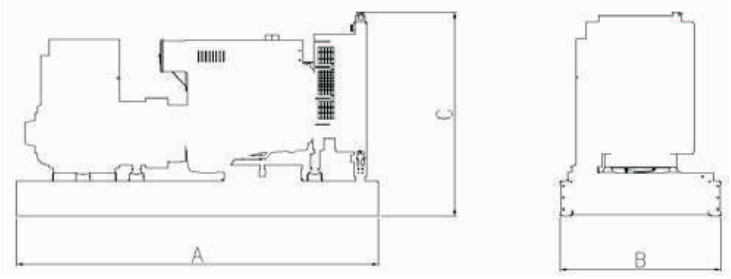
Weights*	Open	Enclosed
Unit dry weight kgs	2295	3872
Unit wet weight kgs	2347	4511

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

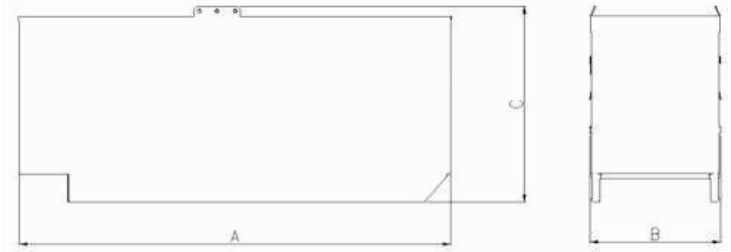
Dimensions	Length	Width	Height
Standard open set dimensions	3135	1100	1928
Enclosed set standard dimensions	4254	1424	2215

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
B681	Wye, 3 Phase	163/125	S/P	UCD274K	380-415V
B726	WYE	125/105	S/P	HC4D	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

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

Advanced Diesel Engineering Ltd.
14 Langthwaite Business Park
South Kirkby, Pontefract
WF9 3AP, ENGLAND