Model: C440 D5
Frequency: 50Hz
Fuel Type: Diesel

» Generator set data sheet
440 kVA Standby

ADVANCED® Diesel Engineering Ltd.

Spec sheet:	**SS10-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	440 (352)				400 (320)			
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**
US gph	5.6	11.0	15.8	21.5	5.3	8.8	13.6	17.1
L/hr	26	50	72	98	24	40	62	78

Engine	**Standby rating**	**Prime rating**
Engine manufacturer	Cummins	
Engine model	NTA855 G7	
Configuration	4 Cycle; In-line; 6 Cylinder Diesel	
Aspiration	Turbocharged and Aftercooled	
Gross engine power output, kWm	391	352
BMEP at set rated load, kPa	2234	1988
Bore, mm	140	
Stroke, mm	152	
Rated speed, rpm	1500	
Piston speed, m/s	7.6	
Compression ratio	0.584027778	
Lube oil capacity, L	34.1	
Overspeed limit, rpm	1800 ±50	
Regenerative power, kW	30	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	372
Maximum fuel inlet restriction, mm Hg	152
Maximum fuel inlet temperature (°C)	70

Air		
Combustion air, m^3/min	31.6	28.5
Maximum air cleaner restriction, kPa	6.2	

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Exhaust

	Standby rating	Prime rating
Exhaust gas flow at set rated load, m^3/min	84.3	78
Exhaust gas temperature, °C	553	525
Maximum exhaust back pressure, kPa	10.2	

Standard set-mounted radiator cooling

Ambient design, °C	50	
Fan load, KW_m	8	
Coolant capacity (with radiator), L	45	
Cooling system air flow, m3/min @ 12.7mmH2O	7.5	
Total heat rejection, BTU/min	15128	13615
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	440 (352)	440 (352)	440 (352)	436.5 (349.2)	405.8 (324.6)
Prime	400 (320)	400 (320)	400 (320)	396.8 (317.4)	365 (292)

Weights*

	Open	Enclosed
Unit dry weight kgs	3493	5041
Unit wet weight kgs	3683	5818

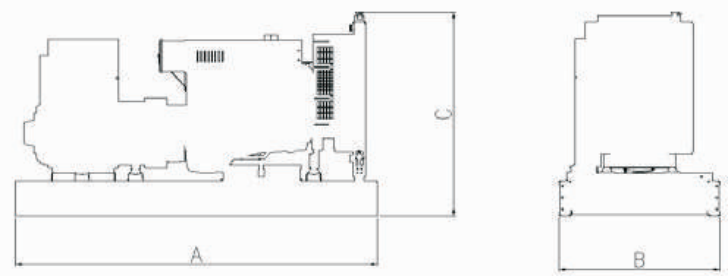
* Weights represent a set with standard features. See outline drawing for weights of other configurations

Dimensions

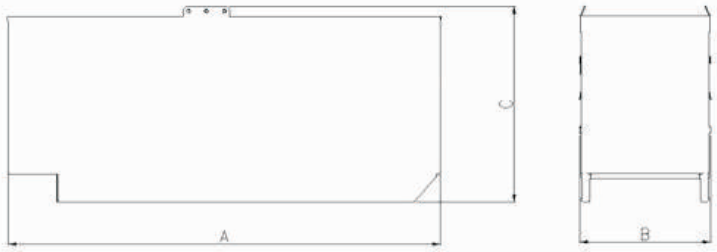
	Length	Width	Height
Standard open set dimensions	3549	1100	2115
Enclosed set standard dimensions	5110	1563	2447

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
B680	Wye, 3 Phase	150/125C	S/P	HC4F	380-415V

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

$$\frac{\text{kWx1000}}{\text{Voltagex1. 73x0.8}}$$

Single phase output

$$\frac{\text{kWxSingleP haseFactor x1000}}{\text{Voltage}}$$

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