Model: C500 D5
Frequency: 50 Hz
Fuel type: Diesel

Spec sheet:	**EMERS-5888-EN**
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	500 (400)				455 (364)			
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**
Gal (UK)/hr	7.7	12.2	17.3	22.8	7.3	11.4	15.8	20.8
L/hr	34.79	55.6	78.5	103.6	32.9	51.6	71.9	94.3

Engine	**Standby rating**	**Prime rating**
Engine manufacturer	Cummins	
Engine model	QSZ13-G5	
Configuration	4 cycle; in-line 6 cylinder diesel	
Aspiration	Turbocharged and charge air-cooled	
Gross engine power output, kWm	469	410
BMEP at set rated load, kPa	2892	2529
Bore, mm	130	
Stroke, mm	163	
Rated speed, rpm	1500	
Piston speed, m/s	8.1	
Compression ratio	17.1	
Lube oil capacity, L	64	
Overspeed limit, rpm	1500 ±10%	
Regenerative power, kW	36	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow

Maximum fuel flow, L/hr	247
Maximum fuel inlet restriction, mm Hg	202
Maximum fuel inlet temperature, °C	71

Air	Standby rating	Prime rating
Combustion air, m^3/min	35.5	33.9
Maximum air cleaner restriction, kPa	3.2 – 6.2	

Exhaust

Exhaust gas flow at set rated load, m^3/min	33.9	31.38
Exhaust gas temperature, °C	523	485
Maximum exhaust back pressure, kPa	13	

Standard set-mounted radiator cooling

Ambient design, °C	50	
Fan load, kWm	18.5	
Coolant capacity (with radiator), L	62	
Cooling system air flow, m^3/sec @ 12.7 mm H_2O	8.1	
Total heat rejection, Btu/min	16700	13700
Maximum cooling air flow static restriction mm H_2O	25.4	

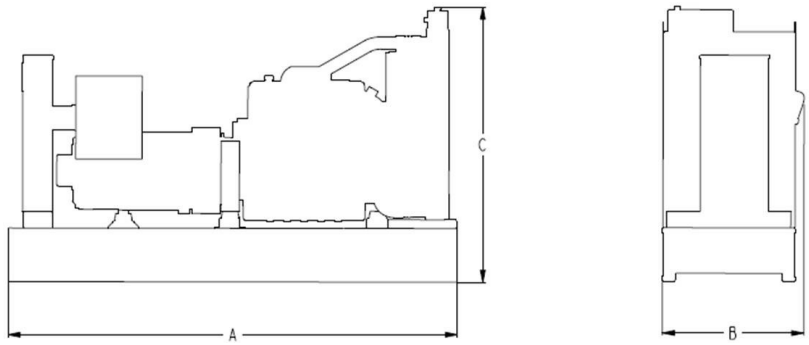
Weights*	Open	Enclosed
Unit dry weight kgs	3988	5177
Unit wet weight kgs	4053	5281

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

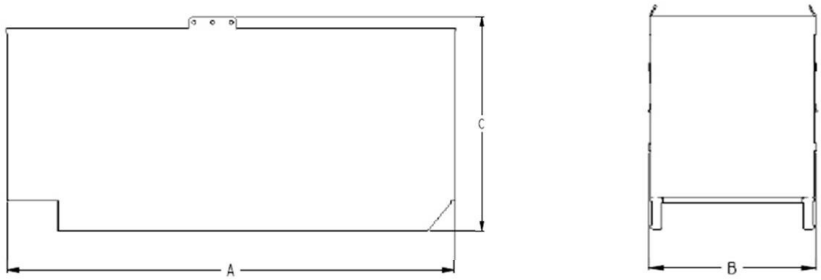
Dimensions	Length	Width	Height
Standard open set dimensions mm	3686	1160	2266
Enclosed set standard dimensions mm	5093	1564	2446

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 ºC	Duty	Alternator	Voltage
Wye, 3-phase	163/125	S/P	HC5C	380-440
Wye, 3-phase	125/105	S/P	HC5E	380-440

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

$$\frac{\text{kW} \times \text{SinglePhaseFactor} \times 1000}{\text{Voltage}}$$

For more information contact Advanced Diesel Engineering or visit our website at: www.adeltd.co.uk

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EMERD-5935-EN (08/17)