## » Generator set data sheet

**Model:** C500 D5e
**Frequency:** 50
**Fuel Type:** Diesel

| | |
|---|---|
| **Spec sheet:** | **SS11-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 | 500 (400) | | | | 455 (364) | | | |
| Load | 1/4 | 1/2 | 3/4 | Full | 1/4 | 1/2 | 3/4 | Full |
| gph | 7.4 | 12.9 | 17.8 | 23.3 | 6.9 | 11.7 | 16.3 | 21.0 |
| L/hr | 33.8 | 58.5 | 81.0 | 106.2 | 31.4 | 53.1 | 74.3 | 95.3 |

## Engine

| | Standby Rating | Prime Rating |
|---|---|---|
| Engine manufacturer | Cummins | |
| Engine model | QSX15 G8 | |
| Configuration | 4 Cycle; In-Line; 6 Cylinder Diesel | |
| Aspiration | Turbo Charged and Charge Air Cooled | |
| Gross engine power output, kWm | 500 | 444 |
| BMEP at set rated load, kPa | 2675 | 2371 |
| Bore, mm | 137 | |
| Stroke, mm | 169 | |
| Rated speed, rpm | 1500 | |
| Piston speed, m/s | 8.4 | |
| Compression ratio | 17:1 | |
| Lube oil capacity, L | 91 | |
| Overspeed limit, rpm | 1500 ±10% | |
| Regenerative power, kW | 37 | |
| Governor type | Electronic | |
| Starting voltage | 24 Volts DC | |

## Fuel flow

| | |
|---|---|
| Maximum fuel flow, L/hr | 424 |
| Maximum fuel inlet restriction, mm Hg | 127 |
| Maximum fuel inlet temperature (°C) | 71 |


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| Air | Standby Rating | Prime Rating |
|---|---|---|
| Combustion air, $m^3$/min | 36.27 | 32.50 |
| Maximum air cleaner restriction, kPa | 3.73 - 6.22 | |

| Exhaust | | |
|---|---|---|
| Exhaust gas flow at set rated load, $m^3$/min | 82.2 | 75.3 |
| Exhaust gas temperature, °C | 515 | 488 |
| Maximum exhaust back pressure, kPa | 10.2 | |

| Standard set-mounted radiator cooling | | |
|---|---|---|
| Ambient design, °C | 50 | |
| Fan load, $KW_m$ | 16 | |
| Coolant capacity (with radiator), L | 65.9 | |
| Cooling system air flow, m3/sec @ 12.7mmH2O | 11.35 | |
| Total heat rejection, BTU/min | 16700 | 13700 |
| Maximum cooling air flow static restriction mmH2O | 25.4 | |

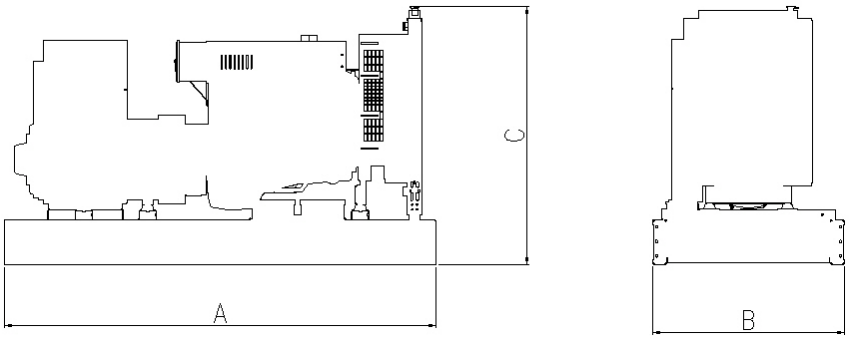
| Weights* | Open | Enclosed |
|---|---|---|
| Unit dry weight kgs | 3987 | 5292 |
| Unit wet weight kgs | 4825 | 6130 |

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

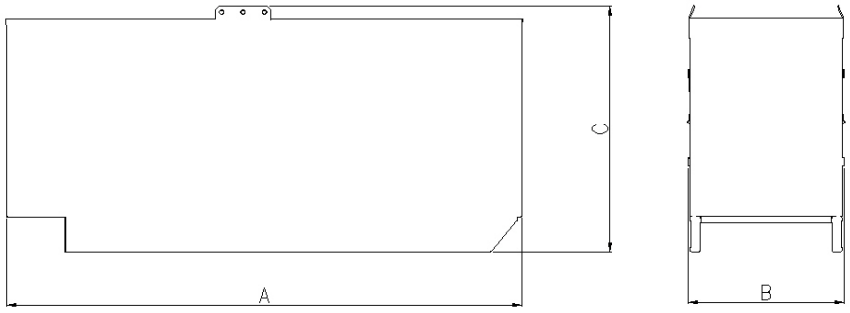
| Dimensions | Length | Width | Height |
|---|---|---|---|
| Standard open set dimensions | 3427 | 1500 | 2066 |
| Enclosed set standard dimensions | 5106 | 1553 | 2447 |

## 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.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## Alternator data

| Connection[1] | Temp rise °C | Duty[2] | Alternator | Voltage |
|---|---|---|---|---|
| Wye, 3 Phase | 163/125C | S/P | HC5C | 380-415V |
| Wye, 3 Phase | 125/105C | S/P | HC5D | 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) 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**

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

**See your distributor for more information.**

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