

» Generator set data sheet

Model: C2500 D5A

Frequency: 50 Fuel Type: Diesel

Maximum fuel inlet temperature (°C)

| Spec sheet: | | | SS17-CPGK | | | | | | | | | | | |
|--|-------------|----------|--|-------------|--------|----------|--------------|-----------------------|--|-----|---|--|--|--|
| Noise data sheet (Open/enclosed): Airflow data sheet: Derate data sheet (Open/enclosed): | | | ND50-OSHHP/ND50-CSHHP AF50-HHP DD50-OSHHP/DD50-CSHHP | | | | | | | | | | | |
| | | | | | | | | Transient data sheet: | | RTF | | | | |
| | | | | | | | | | | | • | | | |
| | Standby | | Data Center Continuous | | | | | | | | | | | |
| Fuel consumption | kVA (kW) | kVA (kW) | |) | | | | | | | | | | |
| Ratings | 2500 (2000) | | | 2250 (1800) | | | | | | | | | | |
| Load | 1/4 | 1/2 | 3/4 | Full | 1/4 | 1/2 | 3/4 | Full | | | | | | |
| gph | 30.8 | 55.4 | 80.9 | 109.9 | 29.2 | 51.0 | 73.8 | 98.0 | | | | | | |
| L/hr | 140.00 | 252.00 | 368.00 | 500.00 | 133.00 | 232.00 | 336.00 | 446.00 | | | | | | |
| Engine | | | Standby | rating | | Data Cen | ter Continuo | nus | | | | | | |
| Engine Engine manufacturer | | | Cummins Data Contains | | | - | | | | | | | | |
| Engine model | | | QSK60-G8 | | | | | | | | | | | |
| Configuration | | | Cast Iron, 60° V16 Cylinder | | | | | | | | | | | |
| Aspiration | | | Turbo Charged and Low Temperature After-Cooled | | | | | | | | | | | |
| Gross engine power output, kWm | | | 2145 1942 | | | | | | | | | | | |
| BMEP at set rated load, kPa | | | 2848 2575 | | | | | | | | | | | |
| Bore, mm | | | 159 | | | | | | | | | | | |
| Stroke, mm | | | 190 | | | | | | | | | | | |
| Rated speed, rpm | | | 1500 | | | | | | | | | | | |
| Piston speed, m/s | | | 9.5 | | | | | | | | | | | |
| Compression ratio | | | 14.5:1 | | | | | | | | | | | |
| Lube oil capacity, L | | | 176 | | | | | | | | | | | |
| Overspeed limit, rpm | | | 1850 ±50 | | | | | | | | | | | |
| Regenerative power, kW | | | 146 | | | | | | | | | | | |
| Governor type | | | Electronic | | | | | | | | | | | |
| Starting voltage | | | 24V Volts DC | | | | | | | | | | | |
| | | | ī | | | | | | | | | | | |
| Fuel flow | | | | | | | | | | | | | | |
| Maximum fuel flow, L/hr | | | 1515 | | | | | | | | | | | |
| Maximum fuel inlet restriction, mm Hg | | | 203 | | | | | | | | | | | |

70

| Air | Standby rating | Data Center Continuous |
|--|-----------------|------------------------|
| Combustion air, m³/min | 156.00 | 145.20 |
| Maximum air cleaner restriction, kPa | 6.2 | |
| Exhaust | | |
| Exhaust gas flow at set rated load, m³/min | 379 | 344.1 |
| Exhaust gas temperature, °C | 485 | 460 |
| Maximum exhaust back pressure, kPa | 6.7 | |
| Standard set-mounted radiator cooling | | |
| Anabiant daning °O | 40 | |
| | 40 | |
| Fan load, KW _m | 38 | |
| Fan load, KW _m | | |
| Ambient design, *C Fan load, KW _m Coolant capacity (with radiator), L Cooling system air flow, m3/sec @ 12.7mmH2O Total heat rejection, BTU/min | 38 492 | 56100 |
| Fan load, KW _m Coolant capacity (with radiator), L Cooling system air flow, m3/sec @ 12.7mmH2O | 38 492 31 | 56100 |

Unit wet weight kgs 17217 N/A

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

| Dimensions | Length | Width | Height |
|----------------------------------|--------|-------|--------|
| Standard open set dimensions | 6175.1 | 2494 | 3115.7 |
| Enclosed set standard dimensions | N/A | N/A | N/A |

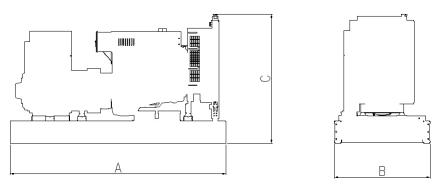
16690

N/A

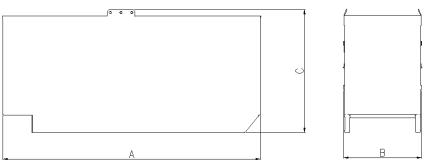
Genset outline

Unit dry weight kgs

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 ¹ | Temp rise °C | Duty ² | Alternator | Voltage |
|-------------------------|--------------|-------------------|------------|------------|
| Wye, 3 Phase | 120/105C | S/P | HVSI804S1 | 11000V |
| Wye, 3 Phase | 150/105C | S/P/C | LVSI804S1 | 380-440V |
| Wye, 3 Phase | 150/105C | S/P/C | MVSI804R1 | 1905/3300V |
| Wye, 3 Phase | 125/80C | S/P/C | HVSI804S1 | 3810/6600V |
| | | | | |
| | | | | |

Ratings definitions

| Emergency Standby Power (ESP) | Limited-Time running Power (LTP): | Prime Power (PRP) | Data Center 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 back-up power for data center applications evaluated at specific site conditions. This rating is based on load profiles and performance requirements consistent with the data center industry. This rating is site specific and changes in application type or location would require further consideration. |

Formulas for calculating full load currents:

Three phase output Single phase output

kWx1000 kWxSinglePhaseFactorx1000

Voltagex1.73x0.8

Voltage

See your distributor for more information.

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