

Generator set data sheet



| | |
|-------------------------|---|
| Model: | C2750D5BE |
| Frequency: | 50 Hz |
| Fuel type: | Diesel |
| kVA Rating: | 2750 Standby |
| Emissions Level: | EPA NSPS Stationary Emergency Tier 2 |

| | |
|---|-----------------|
| Specification Sheet: | S-6524 |
| Exhaust emission data sheet: | EDS-3083 |
| Exhaust emission compliance sheet: | EPA-2062 |
| Sound performance data sheet: | MSP-4089 |
| Cooling performance data sheet: | MCP-2136 |
| Prototype test summary data sheet: | PTS-708 |
| Standard Generator Set Outline: | A055Y473 |

| Fuel consumption | Standby | | | |
|-------------------------|-----------------|------------|------------|-------------|
| | kVA (kW) | | | |
| Ratings | 2750 (2200) | | | |
| Load | 1/4 | 1/2 | 3/4 | Full |
| US gph | 43.2 | 83.1 | 115.1 | 145.7 |
| L/hr | 163.4 | 314.7 | 435.7 | 551.4 |

| Engine | |
|--------------------------------------|---|
| Engine manufacturer | Cummins Inc. |
| Engine model | QSK60-G23 |
| Configuration | Cast iron, V16 cylinder |
| Aspiration | Turbocharged and low temperature after-cooled |
| Gross engine power output, kWm (bhp) | 2370 (3177) |
| BMEP at set rated load, kPa (psi) | 3185 (462) |
| Bore, mm (in) | 159 (6.25) |
| Stroke, mm (in) | 190 (7.48) |
| Rated speed, rpm | 1500 |
| Piston speed, m/s (ft/min) | 9.5 (1869) |
| Compression ratio | 14:5:1 |
| Lube oil capacity, L (qt) | 397 (420) |
| Overspeed limit, rpm | 1725 |
| Regenerative power, kW | 146 |
| Governor type | Electronic |
| Starting voltage | 24 Volts DC |

Fuel flow

| | |
|--|-----------|
| Maximum fuel flow, L/hr (US gph) | 996 (263) |
| Maximum fuel inlet restriction, kPa (Hg) | 16.9 (5) |
| Maximum fuel inlet temperature, °C (°F) | 71 (160) |

Air

| | |
|---|------------------------|
| Combustion air, m ³ /min (scfm) | 163 (5783) |
| Maximum air cleaner restriction, clean/dirty, kPa (in H ₂ O) | 1.49 / 6.22 (6.0 / 25) |
| Alternator cooling air, m ³ /min (cfm) | 225 (7945) |

Exhaust

| | |
|---|-------------|
| Exhaust flow at rated load, m ³ /min (cfm) | 405 (14307) |
| Exhaust temperature, °C (°F) | 480 (896) |
| Maximum back pressure, kPa (in H ₂ O) | 6.8 (27.3) |

Standard set-mounted radiator cooling

| | |
|--|---------------|
| Ambient design, °C (°F) | 50 (122) |
| Fan load, kW _m (HP) | 86 (115) |
| Coolant capacity (with radiator), L (US gal) | 602.8 (159.2) |
| Cooling system air flow, m ³ /sec (scfm) | 48.6 (102977) |
| Total head radiated to ambient, MJ/min (Btu/min) | 22.6 (21355) |
| Total heat rejection, MJ/min (Btu/min) | 101.3 (95885) |
| Maximum cooling air flow static restriction, kPa (in H ₂ O) | 0.12 (0.5) |

Weights²

| | |
|---------------------------|---------------|
| Unit dry weight kgs (lbs) | 23716 (52285) |
| Unit wet weight kgs (lbs) | 24730 (54520) |

Dimensions²

| | Length | Width | Height |
|--------------------------------------|------------|-----------|------------|
| Standard open set dimensions mm (in) | 7112 (280) | 2388 (94) | 3404 (134) |

Notes:

² Weights and dimensions represent a set with standard features. See outline drawing for weights of other configurations.

Alternator data

| Connection ¹ | Temp rise °C | Duty | Alternator | Voltage |
|-------------------------|------------------------|------|-------------------|---------------|
| Star | 80, 105, 125, 150, 163 | S | LVSI804T2, W2, X2 | 380 – 440 |
| Star | 80, 105, 125, 150, 163 | S | MVSI804T2, W2 | 3300 |
| Star | 80, 105, 125, 138 | S | HVSI804T2, W2 | 6300 – 6600 |
| Star | 80, 105, 125, 138 | S | HVSI804T2, W2, X2 | 10500 - 11000 |

Notes:

¹ Limited single phase capability is available from some three phase rated configurations. To obtain single phase rating, multiply the three phase kW rating by the single phase factor². All single phase ratings are at unity power factor.

Ratings definitions¹

| 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. |

Notes:

¹ Rating definitions provided for reference only.

Formulas for calculating full load currents:

| Three phase output | Single phase output |
|---|--|
| $\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$ | $\frac{\text{kW} \times \text{SinglePhaseFactor} \times 1000}{\text{Voltage}}$ |

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor
or visit power.cummins.com

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