

## 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:    | A068G461 |

| Fuel consumption | Standby                  |       |       |       | Prime <sup>1</sup> |       |       |       |
|------------------|--------------------------|-------|-------|-------|--------------------|-------|-------|-------|
|                  | kVA (kW)                 |       |       |       | kVA (kW)           |       |       |       |
| Ratings          | 2750 (2200) <sup>†</sup> |       |       |       | 2500 (2000)        |       |       |       |
| Load             | 1/4                      | 1/2   | 3/4   | Full  | 1/4                | 1/2   | 3/4   | Full  |
| US gph           | 43.2                     | 83.1  | 115.1 | 145.7 | 39.3               | 75.3  | 106.8 | 131.2 |
| L/hr             | 163.4                    | 314.7 | 435.7 | 551.4 | 148.8              | 285.0 | 404.2 | 496.6 |

<sup>†</sup>DCC available at standby power subject to Cummins' site-specific assessment. Please contact your Cummins Distributor.

| Engine                               | Standby Rating                                | Prime Rating <sup>1</sup> |
|--------------------------------------|---|---------------------------|
| 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) | 2388 (3203)                                   | 2157 (2893)               |
| BMEP at set rated load, kPa (psi)    | 3185 (462)                                    | 2875 (417)                |
| 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

|   | Standby Rating         | Prime Rating <sup>1</sup> |
|---|------------------------|---------------------------|
| Combustion air, m <sup>3</sup> /min (scfm)                              | 164 (5787)             | 152 (5363)                |
| Maximum air cleaner restriction, clean/dirty, kPa (in H <sub>2</sub> O) | 1.49 / 6.22 (6.0 / 25) |                           |
| Alternator cooling air, m <sup>3</sup> /min (cfm)                       | 167 (5890)             |                           |

### Exhaust

|   |             |             |
|---|-------------|-------------|
| Exhaust flow at rated load, m <sup>3</sup> /min (cfm) | 405 (14307) | 369 (13031) |
| Exhaust temperature, °C (°F)                          | 480 (896)   | 462 (865)   |
| Maximum back pressure, kPa (in H <sub>2</sub> O)      | 6.8 (27.3)  |             |

### Standard set-mounted radiator cooling

|  |               |              |
|--|---------------|--------------|
| Ambient design, °C (°F)  | 50 (122)      |              |
| Fan load, kW <sub>m</sub> (HP)   | 86 (115)      |              |
| Coolant capacity (with radiator), L (US gal)                           | 602.8 (159.2) |              |
| Cooling system air flow, m <sup>3</sup> /sec (scfm)                    | 48.6 (102977) |              |
| Total head radiated to ambient, MJ/min (Btu/min)                       | 22.6 (21355)  |              |
| Total heat rejection, MJ/min (Btu/min)                                 | 94.2 (89253)  | 91.1 (86380) |
| Maximum cooling air flow static restriction, kPa (in H <sub>2</sub> O) | 0.12 (0.5)    |              |

### Weights<sup>2</sup>

|                           |               |
|---------------------------|---------------|
| Unit dry weight kgs (lbs) | 22227 (49002) |
| Unit wet weight kgs (lbs) | 23318 (51407) |

### Dimensions<sup>2</sup>

|                                      | Length     | Width     | Height     |
|--------------------------------------|------------|-----------|------------|
| Standard open set dimensions mm (in) | 7108 (280) | 2473 (97) | 3403 (134) |

## Alternator data

| Connection <sup>1</sup> | 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    | S9M1D-E4, F4, G4  | 3300          |
| Star                    | 80, 105, 125, 163      | S    | S9H1D-E4, F4, G4  | 6300 – 6600   |
| Star                    | 80, 105, 125, 163      | S    | S9H1D-E4, F4, G4  | 10500 - 11000 |

### Notes:

<sup>1</sup> 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 factor<sup>2</sup>. All single phase ratings are at unity power factor.

## Ratings definitions<sup>1</sup>

| 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 data shown above represents gross engine performance and capabilities as per ISO 3046-1, obtained and corrected in accordance with ISO 15550. | 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 3046-1, obtained and corrected in accordance with ISO 15550. | Applicable for supplying power continuously to a constant load up to the full output rating for unlimited hours. No sustained overload capability is available for this rating. Consult authorized distributor for rating. (Equivalent to Continuous Power in accordance with ISO 8528 and ISO 3046-1, obtained and corrected in accordance with ISO 15550).<br>This rating is not applicable to all generator set models. |

### Notes:

<sup>1</sup> Rating definitions provided for reference only.

## Formulas for calculating full load currents:

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