

Cat® DE88 GC

Diesel Generator Sets



Standby and Prime: 50 Hz & 60 Hz



Image shown may not reflect actual configuration

| | |
|-----------------------|---------------------------------------|
| Engine Model | Cat® C4.4 Inline 4-stroke Diesel |
| Bore x Stroke | 105.0 mm x 127.0 mm (4.1 in x 5.0 in) |
| Displacement | 4.4 L (268.5 in ³) |
| Compression Ratio | 17.25:1 |
| Aspiration | Turbocharged |
| Fuel Injection System | Inline |
| Governor | Mechanical |

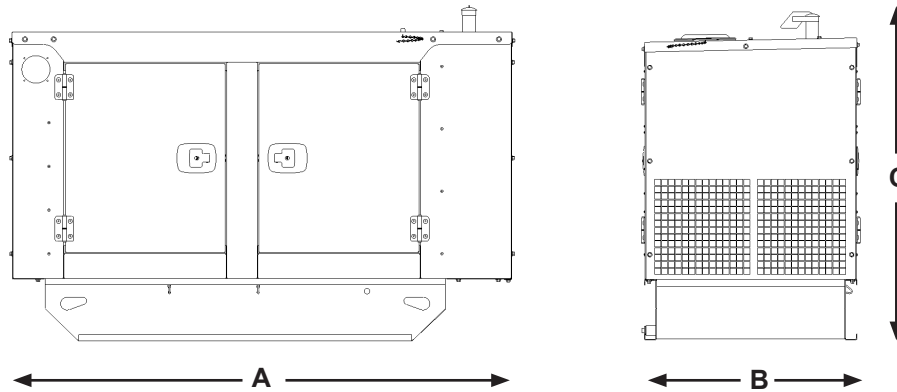
| Model | Standby | | Prime (SRR) | Emission Strategy |
|----------------|-----------------|-----------------|-----------------|-------------------|
| | 50 Hz kVA (ekW) | 60 Hz kVA (ekW) | 50 Hz kVA (ekW) | |
| DE88 GC | 88 (70.4) | 100 (80.0) | 79.2 (63.4) | Low BSFC |

PACKAGE PERFORMANCE

| Performance | Standby | | Prime (SRR) |
|------------------------------------------------------------------|--------------|--------------|--------------|
| | 50 Hz | 60 Hz | 50 Hz |
| Genset power rating | 88 kVA | 100 kVA |) +z\$ kVA |
| Genset power rating with fan @ 0.8 power factor | 70.4 ekW | 80 ekW | (3z&ekW |
| Emissions | Low BSFC | | |
| Performance number | P2516B | P2516A | B\$ #(6 |
| Fuel Consumption | | | |
| Fuel tank capacity, L (gal) | 149 (39.4) | | |
| 100% load with fan, L/hr (gal/hr) | 20.4 (5.4) | 23.8 (6.3) | 18.0 (4.8) |
| 75% load with fan, L/hr (gal/hr) | 15.2 (4.0) | 18.0 (4.8) | 13.6 (3.6) |
| 50% load with fan, L/hr (gal/hr) | 10.5 (2.8) | 12.7 (3.4) | 9.5 (2.5) |
| Cooling System¹ | | | |
| Radiator air flow, m ³ /min (CFM) | 121.2 (4280) | 140.4 (4958) | 121.2 (4280) |
| Total coolant capacity, L (gal) | 13.0 (3.4) | | |
| Inlet Air | | | |
| Max. combustion air intake restriction, kPa (in. water) | 8.0 (32.1) | | |
| Combustion air inlet flow rate, m ³ /min (CFM) | 5.1 (180) | 6.5 (230) | 4.8 (170) |
| Exhaust System | | | |
| Exhaust stack gas temperature, °C (°F) | 580 (1076) | 560 (1040) | 555 (1031) |
| Exhaust gas flow rate, m ³ /min (CFM) | 13.3 (470) | 15.9 (560) | 12.5 (441) |
| Exhaust system backpressure (maximum allowable), kPa (in. water) | 10 (3.0) | 15 (4.4) | 10 (3.0) |
| Heat Rejection | | | |
| Heat rejection to jacket water, kW (BTU/min) | 51 (2900) | 57 (3242) | 46 (2616) |
| Heat rejection to alternator, kW (BTU/min) | 6.7 (381) | 7.1 (404) | 6.7 (381) |
| Heat rejection to atmosphere from engine, kW (BTU/min) | 14 (797) | 15 (854) | 13 (739) |
| Heat rejection to exhaust (total), kW (BTU/min) | 59 (3358) | 71 (4041) | 55 (3127) |

| Alternator ² | 50 Hz (Standby/Prime) | | | 60 Hz (Standby) | | | | |
|---------------------------------------------------|-----------------------|-----------|-----------|-----------------|--------|--------|--------|--------|
| | Voltages | 380 | 415 | 400 | 480 | 440 | 220 | 380 |
| Motor starting capability @ 30% Voltage Dip, skVA | 154 | 183 | 170 | 204 | 172 | 172 | 130 | 154 |
| Current, Amps | 134 / 120 | 122 / 110 | 127 / 114 | 120 | 131 | 262 | 149.5 | 241 |
| Temperature Rise, °C | 150/40 | 150/40 | 150/40 | 130/40 | 130/40 | 130/40 | 163/27 | 150/40 |
| Frame Size | A2137L4 | | | | | | | |
| Excitation | S.E | | | | | | | |

WEIGHTS & DIMENSIONS



Note: General configuration not to be used for installation. See general dimension drawings for detail.

| Length "A" mm (in) | Width "B" mm (in) | Height "C" mm (in) | Dry Weight [#] kg (lb) |
|-----------------------|----------------------|-----------------------|------------------------------------|
| 2275 (89.6) | 1099 (43.3) | 1465 (57.7) | 1245 (2744.8) |

[#]Weight includes standard generator, Enclosure and Integral Tank base

APPLICABLE CODES AND STANDARDS:

AS1359, IEC60034-1, ISO3046, ISO8528, NEMA MG1-33, EAC,CE,UKCA.

Note: Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

STANDBY: Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

PRIME (SRR): Output available with varying load. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year. Maximum run time not to exceed 2000 hours per year.

DEFINITIONS AND CONDITIONS

¹ For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

² Generator temperature rise is based on IEC 60034-1.

RATINGS: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO 3046 standard conditions.

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