Cat® D400 GC

Diesel Generator Sets



Standby: 60 Hz



Image shown may not reflect actual configuration

| Engine Model | Cat® C13 In-line 6, 4-cycle Diesel | | |
|-----------------------|---|--|--|
| Bore x Stroke | 130 mm x 157 mm (5.1 in x 6.2 in) | | |
| Displacement | 12.5 L (763 in³) | | |
| Compression Ratio | 16.3:1 | | |
| Aspiration | Turbocharged Air-to-Air Aftercooled | | |
| Fuel Injection System | MEUI | | |
| Governor | Electronic ADEM™ A4 - G2 Class* capable | | |

| Model | Standby | Emission Strategy | |
|---------|------------------|--|--|
| D400 GC | 400 ekW, 500 kVA | EPA Certified for Stationary Emergency Application | |

PACKAGE PERFORMANCE

| Performance | Standby |
|---|---------------|
| Frequency | 60 Hz |
| Genset Power Rating | 500 kVA |
| Genset power rating with fan @ 0.8 power factor | 400 ekW |
| Emissions | EPA TIER 3 |
| Performance Number | EM1694 |
| Fuel Consumption | |
| 100% load with fan, L/hr (gal/hr) | 105.8 (27.9) |
| 75% load with fan, L/hr (gal/hr) | 90.7 (24.0) |
| 50% load with fan, L/hr (gal/hr) | 66.2 (17.5) |
| 25% load with fan, L/hr (gal/hr) | 37.7 (10.0) |
| Cooling System ¹ | |
| Radiator air flow restriction (system), kPa (in. water) | 0.12 (0.48) |
| Radiator air flow, m³/min (CFM) | 398 (14055) |
| Engine coolant capacity, L (gal) | 66.2 (17.5) |
| Radiator coolant capacity, L (gal) | 37.7 (10) |
| Total coolant capacity, L (gal) | 104 (27.5) |
| Inlet Air | |
| Combustion air inlet flow rate, m³/min (CFM) | 24.4 (862) |
| Max. Allowable Combustion Air Inlet Temp, °C (°F) | 47 (116) |
| Exhaust System | <u> </u> |
| Exhaust stack gas temperature, °C (°F) | 567 (1053) |
| Exhaust gas flow rate, m³/min (CFM) | 82 (2896) |
| Exhaust system backpressure (maximum allowable) kPa (in. water) | 10 (40) |
| Heat Rejection | |
| Heat rejection to jacket water, kW (BTU/min) | 156 (8871) |
| Heat rejection to exhaust (total), kW (BTU/min) | 398 (22634) |
| Heat rejection to aftercooler, kW (BTU/min) | 71 (4037) |
| Heat rejection to atmosphere from engine, kW (BTU/min) | 52 (2957) |
| Heat rejection from alternator, kW (BTU/min) | 29 (1649) |
| Emissions (Nominal) ² | |
| NOx, mg/Nm³ (g/hp-hr) | 2274.7 (4.58) |
| CO, mg/Nm³ (g/hp-hr) | 666.9 (1.35) |
| HC, mg/Nm³ (g/hp-hr) | 6.2 (0.01) |
| PM, mg/Nm³ (g/hp-hr) | 39.4 (0.10) |

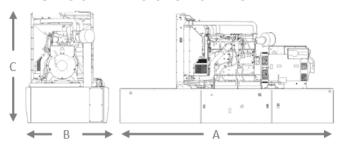
LEHE2009-09 1/2

D400 GC Diesel Generator Sets Electric Power



| Alternator ³ | | |
|---|---------|---------|
| Voltages | 480V | 600V |
| Motor starting capability @ 30% Voltage Dip, skVA | 871 | 731 |
| Current, Amps | 601.4 | 481.1 |
| Frame Size | M3134L4 | M3115L4 |
| Excitation | S.E | AREP |
| Temperature Rise, °C | 105 | 130 |

WEIGHTS & DIMENSIONS – OPEN SET



FUEL TANK CAPACITY

| Tank Design | Total Capacity L (gal) | Useable Capacity L (gal) | |
|-------------|---------------------------|-----------------------------|--|
| Integral | 2820 (744.9) | 2553 (674.4) | |

| Base | Length "A" mm (in) | Width "B" mm (in) | Height "C" mm (in) | Generator Set Weight kg (lb) |
|--------------------|-----------------------|----------------------|-----------------------|---------------------------------|
| Skid (Wide Base) | 4625 (182.8) | 1630 (64.2) | 2039 (80.3) | 3325 (7330.4) |
| Integral Tank Base | 4625 (182.8) | 1630 (64.2) | 2456 (96.7) | 4107 (9054.4) |

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

APPLICABLE CODES AND STANDARDS:

CSA C22.2 No 100-04, UL142, UL489, UL869, cUL/UL2200, NFPA 37, NFPA 70, NFPA 99,NFPA 110, IBC, IEC60034-1, ISO 3046, ISO 8528, NEMA MG 1-33.

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

RATINGS: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

FUEL RATES: Based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/litre (7.001 lbs/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

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 Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 BTU/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.
- ³ UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° $\rm C$ ambient per NEMA MG1-32.
- * Governing Class capability as per ISO8528-5. Consult your local Cat dealer for configuration and site specific transient performance classification.

www.cat.com/electricpower

©2025 Caterpillar All rights reserved.