

Cat® DG125

Gas Generator Sets

North America



| | |
|-------------------|---------------------------------------|
| Engine Model | 6.2L V8 TCAC |
| No. of Cylinders | 8 |
| Bore x Stroke | 101.6 mm x 95.3 mm |
| Displacement | 6.2 Liter |
| Compression Ratio | 9.8:1 |
| Aspiration | Turbocharged & Aftercooled |
| Fuel System | Electronic Regulator / Spark Ignition |
| Governor | G2 Class* capable – Electronic |

Image shown may not reflect actual configuration.

For North America, 60 Hz Market

| Model | Emergency Standby | | Demand Response | | Prime | | Emissions Strategy |
|-------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--|
| | Natural Gas ekW | Propane ekW | Natural Gas ekW | Propane ekW | Natural Gas ekW | Propane ekW | |
| DG125 | 125 | 117.9 | 104.8 | 98.4 | 87.6 | 87.6 | U.S. EPA Certified for Emergency and Non-Emergency |

PACKAGE PERFORMANCE

| Performance | Emergency Standby | | Demand Response | | Prime | |
|--|-------------------|-------------------|-------------------|-------------------|---------------------|------------------|
| | Natural Gas | Propane | Natural Gas | Propane | Natural Gas | Propane |
| Frequency, Hz | 60 | | | | | |
| Genset power rating with fan, ekW (3-Phase) | 125 | 117.9 | 104.8 | 98.4 | 87.6 | 87.6 |
| Genset power rating with fan, ekW (1-Phase) | NA | NA | 100 | 86 | 86 | 86 |
| Performance Numbers (3-Phase / 1-Phase) | EM6754 / NA | EM6755 / NA | EM6936 / EM6938 | EM6937 / EM6939 | EM6940 / EM6942 | EM6941 / EM6943 |
| Fuel System / Fuel Consumption | | | | | | |
| Minimum Running pressure to Electronic Pressure Regulator (EPR), psi (in. water) | 0.25 (7) | 0.25 (7) | 0.25 (7) | 0.25 (7) | 0.25 (7) | 0.25 (7) |
| Maximum Running pressure to Electronic Pressure Regulator (EPR), psi (in. water) | 0.40 (11) | 0.40 (11) | 0.40 (11) | 0.40 (11) | 0.40 (11) | 0.40 (11) |
| 100% load with fan, kg/hr (ft³/hr) | 34 (1543) | 29.2 (546) | 27.2 (1223) | 26.8 (502) | 23.5 (1058) | 24.4 (462.5) |
| 75% load with fan, kg/hr (ft³/hr) | 25.1 (1134) | 21.7 (406) | 21.3 (961.7) | 21.1 (399) | 19.1 (859) | 19.3 (365) |
| 50% load with fan, kg/hr (ft³/hr) | 17.7 (800) | 15.3 (287) | 15.5 (700) | 15.4 (291) | 13.7 (618.3) | 14.2 (265.5) |
| Cooling System¹ | | | | | | |
| Radiator air flow, m³/min (cfm) | 322 (11371) | 322 (11371) | 322 (11371) | 322 (11371) | 322 (11371) | 322 (11371) |
| Radiator air flow restriction (system), kPa (in. water) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Engine coolant capacity, L (gal) | 14.5 (3.8) | 14.5 (3.8) | 14.5 (3.8) | 14.5 (3.8) | 14.5 (3.8) | 14.5 (3.8) |
| Radiator coolant capacity, L (gal) | 7.6 (2.0) | 7.6 (2.0) | 7.6 (2.0) | 7.6 (2.0) | 7.6 (2.0) | 7.6 (2.0) |
| Total coolant capacity, L (gal) | 22.1 (5.8) | 22.1 (5.8) | 22.1 (5.8) | 22.1 (5.8) | 22.1 (5.8) | 22.1 (5.8) |
| Inlet Air | | | | | | |
| Combustion air inlet flow rate, m³/min (cfm) (kg/hr) | 7.8 (277) (564) | 6.3 (224) (457.5) | 6.2 (222) (452.7) | 5.7 (204.6) (418) | 5.3 (190.7) (389.6) | 5 (186) (380.4) |
| Maximum allowable intake air restriction, kPa (in. water) | 3.48 (13.98) | 3.48 (13.98) | 3.48 (13.98) | 3.48 (13.98) | 3.48 (13.98) | 3.48 (13.98) |
| Exhaust System | | | | | | |
| Exhaust gas temperature after turbo, °C (°F) | 728 (1342) | 725 (1337) | 687 (1268) | 722 (1331) | 665 (1229) | 694 (1281) |
| Exhaust gas flow rate, m³/min (cfm) (kg/hr) | 31.7 (1095) (598) | 25.3 (894) (487) | 24.4 (862) (480) | 23 (812) (444) | 20.4 (720) (413) | 20.3 (716) (405) |
| Maximum allowable exhaust system back pressure, kPa (in. water) | 15 (60.28) | 15 (60.28) | 15 (60.28) | 15 (60.28) | 15 (60.28) | 15 (60.28) |

*Preliminary Data – Subject to change without notice.

PACKAGE PERFORMANCE (contd.)

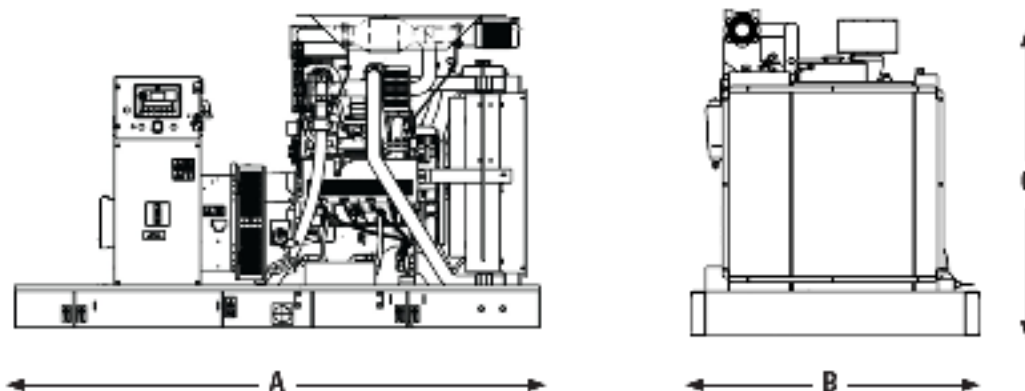
| Heat Rejection (3-Phase) | Emergency Standby | | Demand Response | | Prime | |
|--|-------------------|-------------|-----------------|-------------|-------------|-------------|
| | Natural Gas | Propane | Natural Gas | Propane | Natural Gas | Propane |
| Heat rejection to jacket water, kW (Btu/min) | 91 (5175) | 76 (4322) | 69 (3924) | 66 (3753) | 60 (3412) | 60 (3412) |
| Heat rejection to after cooler, kW (Btu/min) | 16 (910) | 13 (739) | 13 (739) | 11 (625) | 8 (455) | 8 (455) |
| Heat rejection to oil cooler, kW (Btu/min) | 15 (853) | 11 (625) | 10 (568) | 9 (511) | 9 (511) | 9 (511) |
| Heat rejection to atmosphere from engine, kW (Btu/min) | 68 (3867) | 46 (2616) | 44 (2502) | 42 (2388) | 38 (2161) | 38 (2161) |
| Heat rejection to exhaust, kW (Btu/min) | 144 (8189) | 112 (6369) | 101 (5743) | 98 (5573) | 92 (5232) | 91 (5175) |
| Lube System | | | | | | |
| Sump refill with filter, L (gal) | 5.4 (1.43) | 5.4 (1.43) | 5.4 (1.43) | 5.4 (1.43) | 5.4 (1.43) | 5.4 (1.43) |
| Maximum oil temperature, °C (°F) | 121 (250) | 121 (250) | 121 (250) | 121 (250) | 121 (250) | 121 (250) |
| Maximum oil capacity, L (gal) | 7.6 (2) | 7.6 (2) | 7.6 (2) | 7.6 (2) | 7.6 (2) | 7.6 (2) |
| Minimum oil capacity, L (gal) | 4.7 (1.24) | 4.7 (1.24) | 4.7 (1.24) | 4.7 (1.24) | 4.7 (1.24) | 4.7 (1.24) |
| Emissions (Nominal) | | | | | | |
| NOx + HC, g/kW-hr (g/hp-hr) | 0.48 (0.35) | 0.68 (0.50) | 0.32 (0.23) | 0.65 (0.47) | 0.24 (0.17) | 0.48 (0.35) |
| CO, g/kW-hr (g/hp-hr) | 0.94 (0.69) | 3.90 (2.86) | 0.35 (0.25) | 2.89 (2.12) | 0.27 (0.19) | 1.76 (1.29) |

ALTERNATOR DATA

| DG125 | | | | | | |
|--|---------------|-----------|-----------|-----------|-----------|---------------|
| Alternator | 60 Hz 3-Phase | | | | | 60 Hz 1-Phase |
| Voltages | 480/277 | 240/120 | 240/139 | 208/120 | 600/346 | 240/120 |
| Temperature rise ² , °C | 105 | 105 | 105 | 105 | 105 | 105 |
| Motor starting capability @ 30% Voltage Dip, skVA | 336 | 326 | 326 | 326 | 349 | 229 |
| Frame size | M2254L4 | M2254L4 | M2254L4 | M2254L4 | M2254L4 | M2238L4 |
| Excitation | PMG | PMG | PMG | PMG | PMG | SE |
| Rated Current, Amps – Natural Gas / Propane | | | | | | |
| Emergency Standby | 188 / 177 | 376 / 352 | 376 / 352 | 434 / 409 | 150 / 141 | NA |
| Demand Response | 158 / 148 | 315 / 296 | 315 / 296 | 364 / 342 | 126 / 117 | 417 / 358 |
| Prime | 131 / 131 | 263 / 263 | 263 / 263 | 301 / 301 | 105 / 105 | 358 / 358 |

Motor starting capability is based on the assumption of 0.6 pf.
 Temperature rise and Current in amps are based on the Standby rating at the respective voltages.

WEIGHTS & DIMENSIONS



| Length "A" mm (in) | Width "B" mm (in) | Height "C" mm (in) | Dry Weight Kg (lb) |
|-----------------------|----------------------|-----------------------|-----------------------|
| 2442 (96) | 1297 (51) | 1449 (57) | 1464 (3226) |

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

*Preliminary Data – Subject to change without notice.

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.

EMERGENCY STANDBY POWER (ESP): Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby rated kW. Typical operation is 50 hours per year, with maximum expected usage of 200 hours per year.

DEMAND RESPONSE POWER: Output available with varying load when participating in a demand response or economic dispatch program. Average power output is 70% of the standby rated kW. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

PRIME POWER: Output available with varying load for an unlimited time. Average power output is 70% of the prime rated kW. Typical peak demand is 100% of prime rated kW.

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

1 CFH = 1000 BTU/HR

Fuel Rates are based on heat values of 962 BTU/SCF for Natural Gas and 2472 BTU/SFC for Propane Vapor @77°F (25°C) and 2152 ft (656 m) above sea level.

DEFINITIONS AND CONDITIONS

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

² Generator temperature rise is based on 40°C (104°F) ambient per NEMA MG1-32.

*Governing Class capability as per ISO-8528-5. Consult your local Cat dealer for configuration and site specific transient performance classification.

LET'S DO THE WORK.™

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Cat® DG125

Gas Generator Sets

Latin America



| | |
|-------------------|---------------------------------------|
| Engine Model | 6.2L V8 TCAC |
| No. of Cylinders | 8 |
| Bore x Stroke | 101.6 mm x 95.3 mm |
| Displacement | 6.2 Liter |
| Compression Ratio | 9.8:1 |
| Aspiration | Turbocharged & Aftercooled |
| Fuel System | Electronic Regulator / Spark Ignition |
| Governor | G2 Class* capable – Electronic |

Image shown may not reflect actual configuration.

For Latin America, 60 Hz Market

| Model | Emergency Standby | | Prime | | Emissions Strategy |
|-------|--------------------|----------------|--------------------|----------------|--|
| | Natural Gas ekW | Propane ekW | Natural Gas ekW | Propane ekW | |
| DG125 | 125 | 117.9 | 87.6 | 87.6 | U.S. EPA Certified for Emergency and Non-Emergency |

PACKAGE PERFORMANCE

| Performance | Emergency Standby | | Prime | |
|--|-------------------|-------------------|---------------------|------------------|
| | Natural Gas | Propane | Natural Gas | Propane |
| Frequency, Hz | 60 | | | |
| Genset power rating with fan, ekW (3-Phase) | 125 | 117.9 | 87.6 | 87.6 |
| Genset power rating with fan, ekW (1-Phase) | NA | NA | 86 | 86 |
| Performance Numbers (3-Phase / 1-Phase) | EM6754 / NA | EM6755 / NA | EM6940 / EM6942 | EM6941 / EM6943 |
| Fuel System / Fuel Consumption | | | | |
| Minimum Running pressure to Electronic Pressure Regulator (EPR), psi (in. water) | 0.25 (7) | 0.25 (7) | 0.25 (7) | 0.25 (7) |
| Maximum Running pressure to Electronic Pressure Regulator (EPR), psi (in. water) | 0.40 (11) | 0.40 (11) | 0.40 (11) | 0.40 (11) |
| 100% load with fan, kg/hr (ft³/hr) | 34 (1543) | 29.2 (546) | 23.5 (1058) | 24.4 (462.5) |
| 75% load with fan, kg/hr (ft³/hr) | 25.1 (1134) | 21.7 (406) | 19.1 (859) | 19.3 (365) |
| 50% load with fan, kg/hr (ft³/hr) | 17.7 (800) | 15.3 (287) | 13.7 (618.3) | 14.2 (265.5) |
| Cooling System¹ | | | | |
| Radiator air flow, m³/min (cfm) | 322 (11371) | 322 (11371) | 322 (11371) | 322 (11371) |
| Radiator air flow restriction (system), kPa (in. water) | 0.12 | 0.12 | 0.12 | 0.12 |
| Engine coolant capacity, L (gal) | 14.5 (3.8) | 14.5 (3.8) | 14.5 (3.8) | 14.5 (3.8) |
| Radiator coolant capacity, L (gal) | 7.6 (2.0) | 7.6 (2.0) | 7.6 (2.0) | 7.6 (2.0) |
| Total coolant capacity, L (gal) | 22.1 (5.8) | 22.1 (5.8) | 22.1 (5.8) | 22.1 (5.8) |
| Inlet Air | | | | |
| Combustion air inlet flow rate, m³/min (cfm) (kg/hr) | 7.8 (277) (564) | 6.3 (224) (457.5) | 5.3 (190.7) (389.6) | 5 (186) (380.4) |
| Maximum allowable intake air restriction, kPa (in. water) | 3.48 (13.98) | 3.48 (13.98) | 3.48 (13.98) | 3.48 (13.98) |
| Exhaust System | | | | |
| Exhaust gas temperature after turbo, °C (°F) | 728 (1342) | 725 (1337) | 665 (1229) | 694 (1281) |
| Exhaust gas flow rate, m³/min (cfm) (kg/hr) | 31.7 (1095) (598) | 25.3 (894) (487) | 20.4 (720) (413) | 20.3 (716) (405) |
| Maximum allowable exhaust system back pressure, kPa (in. water) | 15 (60.28) | 15 (60.28) | 15 (60.28) | 15 (60.28) |

*Preliminary Data – Subject to change without notice.

PACKAGE PERFORMANCE (contd.)

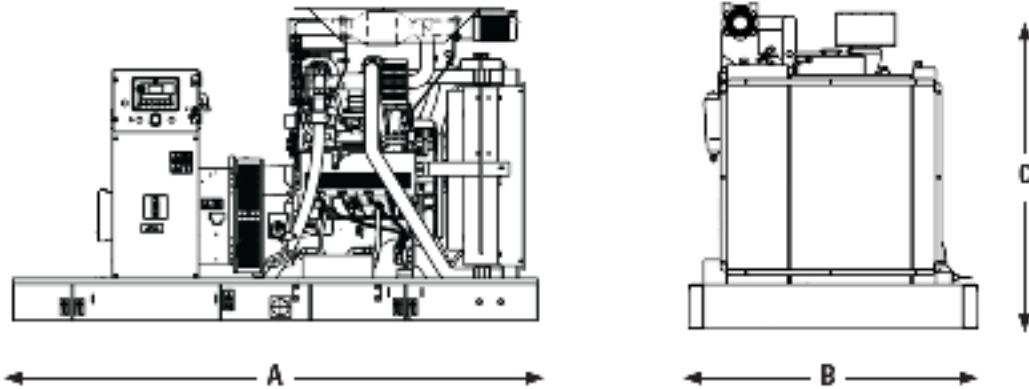
| Heat Rejection (3-Phase) | Emergency Standby | | Prime | |
|--|-------------------|-------------|-------------|-------------|
| | Natural Gas | Propane | Natural Gas | Propane |
| Heat rejection to jacket water, kW (Btu/min) | 91 (5175) | 76 (4322) | 60 (3412) | 60 (3412) |
| Heat rejection to after cooler, kW (Btu/min) | 16 (910) | 13 (739) | 8 (455) | 8 (455) |
| Heat rejection to oil cooler, kW (Btu/min) | 15 (853) | 11 (625) | 9 (511) | 9 (511) |
| Heat rejection to atmosphere from engine, kW (Btu/min) | 68 (3867) | 46 (2616) | 38 (2161) | 38 (2161) |
| Heat rejection to exhaust, kW (Btu/min) | 144 (8189) | 112 (6369) | 92 (5232) | 91 (5175) |
| Lube System | | | | |
| Sump refill with filter, L (gal) | 5.4 (1.43) | 5.4 (1.43) | 5.4 (1.43) | 5.4 (1.43) |
| Maximum oil temperature, °C (°F) | 121 (250) | 121 (250) | 121 (250) | 121 (250) |
| Maximum oil capacity, L (gal) | 7.6 (2) | 7.6 (2) | 7.6 (2) | 7.6 (2) |
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| Emissions (Nominal) | | | | |
| NOx + HC, g/kW-hr (g/hp-hr) | 0.48 (0.35) | 0.68 (0.50) | 0.24 (0.17) | 0.48 (0.35) |
| CO, g/kW-hr (g/hp-hr) | 0.94 (0.69) | 3.90 (2.86) | 0.27 (0.19) | 1.76 (1.29) |

ALTERNATOR DATA

| DG125 | | | | | | | | |
|--|---------------|-----------|-----------|-----------|-----------|-----------|-----------|---------------|
| Alternator | 60 Hz 3-Phase | | | | | | | 60 Hz 1-Phase |
| Voltages | 480/277 | 380/220 | 240/120 | 240/139 | 220/127 | 208/120 | 600/346 | 240/120 |
| Temperature rise ² , °C | 105 | 105 | 105 | 105 | 105 | 105 | 105 | 105 |
| Motor starting capability @ 30% Voltage Dip, skVA | 336 | 278 | 326 | 326 | 359 | 326 | 349 | 229 |
| Frame size | M2254L4 | M2275L4 | M2254L4 | M2254L4 | M2275L4 | M2254L4 | M2254L4 | M2238L4 |
| Excitation | PMG | PMG | PMG | PMG | PMG | PMG | PMG | SE |
| Rated Current, Amps – Natural Gas / Propane | | | | | | | | |
| Emergency Standby | 188 / 177 | 238 / 221 | 376 / 352 | 376 / 352 | 410 / 383 | 434 / 409 | 150 / 141 | NA |
| Prime | 131 / 131 | 166 / 166 | 263 / 263 | 263 / 263 | 282 / 282 | 301 / 301 | 105 / 105 | 358 / 358 |

Motor starting capability is based on the assumption of 0.6 pf.
 Temperature rise and Current in amps are based on the Standby rating at the respective voltages.

WEIGHTS & DIMENSIONS



| Length "A" mm (in) | Width "B" mm (in) | Height "C" mm (in) | Dry Weight Kg (lb) |
|-----------------------|----------------------|-----------------------|-----------------------|
| 2442 (96) | 1297 (51) | 1449 (57) | 1464 (3226) |

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

1 CFH = 1000 BTU/HR

Fuel Rates are based on heat values of 962 BTU/SCF for Natural Gas and 2472 BTU/SFC for Propane Vapor @77°F (25°C) and 2152 ft (656 m) above sea level.

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