Cat[®] DE1250 GC Diesel Generator Sets





| Engine | C32 | |
|-------------------------------------|-------------|--|
| Bore – mm (in) | 145 (5.7) | |
| Stroke – mm (in) | 162 (6.4) | |
| Displacement – L (in ³) | 32.1 (1959) | |
| Compression Ratio | 15.0:1 | |
| Aspiration | TA | |
| Fuel System | EUI | |
| Governor Type | ADEM™ A4 | |

Image shown might not reflect actual configuration.

| Model | Standby 50 Hz kVA (ekW) | Emissions Performance | |
|-----------|----------------------------|------------------------------------|--|
| DE1250 GC | 1250 (1000) | Optimized for Low Fuel Consumption | |

Standard Features

Cat[®] Diesel Engine

- · Designed and optimized for low fuel consumption
- · Industry-leading mechanical and electrical design
- · Industry-leading motor starting capabilities
- High efficiency

Generator Set Package

- Conforms to ISO8528-5 G3 load acceptance requirements
- Reliability is verified through prototype testing, which includes torsional vibration, fuel consumption, oil consumption, transient performance, and endurance testing

Alternators

- Superior motor starting capability minimizes the need for oversizing the generator
- Designed to match the performance and output characteristics of Cat diesel engines

Cooling System

- Cooling systems available to operate in ambient temperatures 50°C @ 0m
- · Tested to ensure proper generator set cooling

GCCP Control Panels

- User-friendly set-up and button layout for ease of use
- Multiple parameters are monitored & displayed simultaneously for full visibility
- The module can be configured to suit a wide range of applications for user flexibility

Warranty

- 24 months/1000-hour warranty for standby and mission critical ratings
- Extended service protection is available to provide extended coverage options

Worldwide Product Support

- Cat dealers have over 1,800 dealer branch stores operating in 200 countries
- Your local Cat dealer provides extensive post-sale support, including maintenance and repair agreements

Financing

- Caterpillar offers an array of financial products to help you succeed through financial service excellence
- Options include loans, finance lease, operating lease, working capital, and revolving line of credit
- Contact your local Cat dealer for availability in your region

DE1250 GC Diesel Generator Sets Electric Power

Standard and Optional Equipment

Engine

Air Cleaner
Single element
Dual element
Stantard batteries
Jacket water heater
Engine Attachments
Manual Sump Pump
Fuel Transfer Pump (With fuel tank base only)
6" Exhaust Flexible Fittings
6" Exhaust Flange Kits

Alternator

Output voltage 400V 415V Temperature Rise (over 40°C ambient) 150°C Winding type Random wound Excitation Internal excitation (IE) Permanent magnet (PM) Attachments Anti-condensation heater

Power Termination

Type
Power Terminal Strips
Circuit breaker
2000A
3-pole 4-pole
Manually operated
Electrically operated

Factory Enclosure

Sound attenuated
 Attachments DC lighting package

Fuel Tank

1000 L (264 gal) (With enclosure only)

Control System

Controller GCCP 1.3 GCCP 1.4 Attachments Ground Fault Indication

Charging

Battery charger – 10A

Cat Connect Connectivity Ethernet Cellular

| Extended | Service | Options |
|----------|---------|---------|
| Tauraa | | |

Terms

 3 year

 4 year

 5 year

 Coverage

 Silver

 Gold

Certifications

□ CE □ EAC □ UKCA

Note: Some options may not be available on all models. Certifications may not be available with all model configurations. Consult factory for availability.



DE1250 GC Diesel Generator Sets Electric Power



Package Performance – DE1250 GC

| Performance | Sta | ndby | Missior | n Critical | |
|---|--------|-----------|---------|------------|--|
| Frequency | 50 | 50 Hz | | 50 Hz | |
| Gen set power rating with fan | 1000 | 1000 ekW | | 1000 ekW | |
| Gen set power rating with fan @ 0.8 power factor | 125 | 1250 kVA | | 1250 kVA | |
| Fueling strategy | Low | Low Fuel | | Low Fuel | |
| Performance number | EMO | EM0679-00 | | EM0777-01 | |
| Fuel Consumption | | | • | | |
| 100% load with fan – L/hr (gal/hr) | 252.3 | (66.7) | 252.3 | (66.7) | |
| 75% load with fan – L/hr (gal/hr) | 185.5 | (49.0) | 185.5 | (49.0) | |
| 50% load with fan – L/hr (gal/hr) | 128.4 | (33.9) | 128.4 | (33.9) | |
| 25% load with fan – L/hr (gal/hr) | 75.0 | (19.8) | 75.0 | (19.8) | |
| Cooling System | | | | | |
| Radiator air flow restriction (system) – kPa (in. water) | 0.12 | (0.48) | 0.12 | (0.48) | |
| Radiator air flow – m³/min (cfm) | 925 | (32666) | 925 | (32666) | |
| Engine coolant capacity – L (gal) | 55 | (14.5) | 55 | (14.5) | |
| Radiator coolant capacity – L (gal) | 49 | (12.5) | 49 | (12.5) | |
| Total coolant capacity – L (gal) | 104 | (27.5) | 104 | (27.5) | |
| Inlet Air | | | | | |
| Combustion air inlet flow rate – m³/min (cfm) | 74.2 | (2619.0) | 74.2 | (2619.0) | |
| Exhaust System | | | | | |
| Exhaust stack gas temperature – °C (°F) | 464.6 | (868.3) | 464.6 | (868.3) | |
| Exhaust gas flow rate – m³/min (cfm) | 192.9 | (6812.8) | 192.9 | (6812.8) | |
| Exhaust system backpressure (maximum allowable) – kPa (in. water) | 6.7 | (27.0) | 6.7 | (27.0) | |
| Heat Rejection | | | | | |
| Heat rejection to jacket water - kW (Btu/min) | 340 | (19353) | 340 | (19353) | |
| Heat rejection to exhaust (total) – kW (Btu/min) | 871 | (49555) | 871 | (49555) | |
| Heat rejection to aftercooler – kW (Btu/min) | 241 | (13691) | 241 | (13691) | |
| Heat rejection to atmosphere from engine – kW (Btu/min) | 139 | (7891) | 139 | (7891) | |
| Heat rejection from alternator – kW (Btu/min) | 52 | (2960) | 52 | (2960) | |
| Emissions* (Nominal) | | | | | |
| NOx mg/Nm ³ (g/hp-h) | 2928.1 | (5.80) | 2928.1 | (5.80) | |
| CO mg/Nm ³ (g/hp-h) | 229.6 | (0.46) | 229.6 | (0.46) | |
| HC mg/Nm ³ (g/hp-h) | 5.7 | (0.01) | 5.7 | (0.01) | |
| PM mg/Nm ³ (g/hp-h) | 11.9 | (0.03) | 11.9 | (0.03) | |
| Emissions* (Potential Site Variation) | | | | | |
| NOx mg/Nm ³ (g/hp-h) | 3543.0 | (7.02) | 3543.0 | (7.02) | |
| CO mg/Nm ³ (g/hp-h) | 429.3 | (0.86) | 429.3 | (0.86) | |
| HC mg/Nm ³ (g/hp-h) | 10.7 | (0.02) | 10.7 | (0.02) | |
| PM mg/Nm ³ (g/hp-h) | 23.2 | (0.05) | 23.2 | (0.05) | |

*mg/Nm³ levels are corrected to 5% O₂. Contact your local Cat dealer for further information.

DE1250 GC Diesel Generator Sets Electric Power





| Model | Dim "A" Dim "B" mm (in) mm (in) | | Dim "C" _{mm (in)} | Wet Weight ^{kg (lb)} | |
|-----------|------------------------------------|-------------|-------------------------------|----------------------------------|--|
| DE1250 GC | 4175 (164.3) | 1856 (73.1) | 2217.5 (87.3) | 7079 (15606) | |

Note: For reference only. Do not use for installation design. Contact your local Cat dealer for precise weights and dimensions.

Ratings and Definitions

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.

Mission Critical

Output available with varying load for the duration of the interruption of the normal source power. Average power output is 85% of the mission critical power rating. Typical peak demand up to 100% of rated power for up to 5% of the operating time. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Applicable Codes and Standards

AS1359, IEC 60034-1, ISO 3046, ISO 8528, 2014/35/EU, 2006/42/EC, 2014/30/EU, 2008 No. 1597, 2016 No. 1091, 2016 No. 1101 and 2001 No. 1701 amended by 2005 No. 3525 **Note:** Codes may not be available in all model configurations. Please consult your local Cat dealer for availability.

Fuel Rates

Fuel rates are 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/liter (7.001 lbs/U.S. gal.)



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