## Cat® DE1250S GC

## **Diesel Generator Sets**





Image shown might not reflect actual configuration.

Engine	C32	
Bore – mm (in)	145 (5.7)	
Stroke – mm (in)	162 (6.4)	
Displacement – L (in³)	32.1 (1959)	
Compression Ratio	15.0:1	
Aspiration	TA	
Fuel System	EUI	
Governor Type	ADEM™ A4	

Model	Standby 60 Hz kVA (ekW)	Emissions Performance	
DE1250S GC	1562 (1250)	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 @ 0 m
- 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

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# **DE1250S GC Diesel Generator Sets Electric Power**



## **Standard and Optional Equipment**

Engine	Power Termination	Charging
Air Cleaner	Туре	■ Battery charger – 10A
☐ Single element	□ Power Terminal Strips	
□ Dual element	☐ Circuit breaker	Cat Connect
Starting	□ 2500A	Connectivity
☐ Standard batteries	□ 3-pole □ 4-pole	☐ Ethernet
□ Jacket water heater	☐ Manually operated	☐ Cellular
Engine Attachments	☐ Electrically operated	
☐ Manual Sump Pump		Extended Service Options
☐ Fuel Transfer Pump	Factory Enclosure	Terms
(With fuel tank base only)	□ Sound attenuated	□ 3 year
☐ 6" Exhaust Flexible Fittings	Attachments	□ 4 year
☐ 6" Exhaust Flange Kits	□ DC lighting package	☐ 5 year
		Coverage
Alternator	Fuel Tank	☐ Silver
Output voltage	☐ 1000 L (264 gal)	☐ Gold
□ 380V	(With Enclosure only)	
□ 480V	0 1 10 1	
Temperature Rise	Control System	
(over 40°C ambient)	Controller	
□ 150°C	□ GCCP 1.3	
Winding type	□ GCCP 1.4	
☐ Random wound	Attachments	
Excitation	☐ Ground Fault Indication	
☐ Internal excitation (IE)		
☐ Permanent magnet (PM)		
Attachments		
□ Anti-condensation heater		

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

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# **DE1250S GC Diesel Generator Sets Electric Power**



## Package Performance - DE1250S GC

Performance	Sta	Standby		Mission Critical	
Frequency	60	60 Hz		60 Hz	
Gen set power rating with fan	1250	1250 ekW		1250 ekW	
Gen set power rating with fan @ 0.8 power factor	1562	1562.5 kVA		1562.5 kVA	
Fueling strategy	Low Fuel C	Low Fuel Consumption		Low Fuel Consumption	
Performance number	EM2	EM2322-03		EM2530-01	
Fuel Consumption					
100% load with fan – L/hr (gal/hr)	326.4	(86.2)	326.4	(86.2)	
75% load with fan – L/hr (gal/hr)	238.8	(63.1)	238.8	(63.1)	
50% load with fan – L/hr (gal/hr)	164.0	(43.3)	164.0	(43.3)	
25% load with fan – L/hr (gal/hr)	97.0	(25.6)	97.0	(25.6)	
Cooling System					
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	
Radiator air flow – m³/min (cfm)	1109	(39164)	1109	(39164)	
Engine coolant capacity – L (gal)	55	(14.5)	55	(14.5)	
Radiator coolant capacity – L (gal)	61	(16.1)	61	(16.1)	
Total coolant capacity – L (gal)	116	(30.6)	116	(30.6)	
Inlet Air					
Combustion air inlet flow rate – m³/min (cfm)	109.6	(3870.7)	109.6	(3870.7)	
Exhaust System					
Exhaust stack gas temperature – °C (°F)	404.6	(760.3)	404.6	(760.3)	
Exhaust gas flow rate – m³/min (cfm)	258.8	(9138.4)	258.8	(9138.4)	
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)	392	(22307)	392	(22307)	
Heat rejection to exhaust (total) – kW (Btu/min)	1074	(61080)	1074	(61080)	
Heat rejection to aftercooler – kW (Btu/min)	433	(24622)	433	(24622)	
Heat rejection to atmosphere from engine – kW (Btu/min)	218	(12420)	218	(12420)	
Heat rejection from alternator – kW (Btu/min)	58.9	(3350)	58.9	(3350)	
Emissions* (Nominal)					
NOx mg/Nm³ (g/hp-h)	2716.5	(6.19)	2716.5	(6.19)	
CO mg/Nm³ (g/hp-h)	89.6	(0.17)	89.6	(0.17)	
HC mg/Nm³ (g/hp-h)	10.2	(0.02)	10.2	(0.02)	
PM mg/Nm³ (g/hp-h)	19.6	(0.04)	19.6	(0.04)	
Emissions* (Potential Site Variation)					
NOx mg/Nm³ (g/hp-h)	3287.0	(7.49)	3287.0	(7.49)	
CO mg/Nm³ (g/hp-h)	167.6	(0.33)	167.6	(0.33)	
HC mg/Nm³ (g/hp-h)	19.3	(0.05)	19.3	(0.05)	
PM mg/Nm³ (g/hp-h)	38.2	(0.09)	38.2	(0.09)	

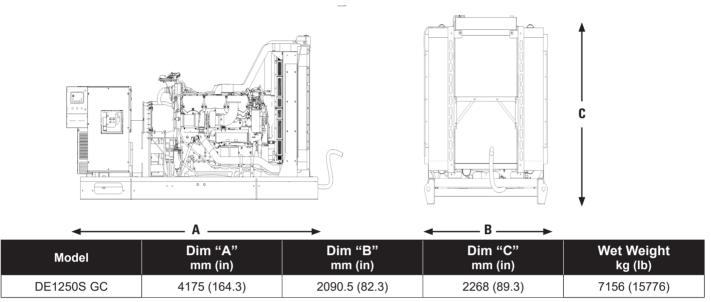
 $<sup>^*</sup> mg/Nm^3 \ levels \ are \ corrected \ to \ 5\% \ O_2. \ Contact \ your \ local \ Cat \ dealer \ for \ further \ information.$ 

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## **DE1250S GC Diesel Generator Sets Electric Power**



## **Weights and Dimensions**



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**

IEC 60034-1, ISO 3046, ISO 8528.

**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.)

www.cat.com/electricpower

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Materials and specifications are subject to change without notice.