## Cat® DE1250 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 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

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## **DE1250 GC Diesel Generator Sets Electric Power**



## **Standard and Optional Equipment**

**Attachments** 

☐ Anti-condensation heater

Engine	Power Termination	Charging	
Air Cleaner	Туре	☐ Battery charger – 10A	
☐ Single element	□ Power Terminal Strips		
□ Dual element	☐ Circuit breaker	Cat Connect	
Starting	□ 2000A	Connectivity	
☐ Standard batteries	□ 3-pole □ 4-pole	□ Ethernet	
☐ Jacket water heater	☐ Manually operated	☐ Cellular	
Engine Attachments	☐ Electrically operated		
☐ Manual Sump Pump			
☐ Fuel Transfer Pump	Factory Enclosure	<b>Extended Service Options</b>	
(With fuel tank base only)	☐ Sound attenuated	Terms	
☐ 6" Exhaust Flexible Fittings	Attachments	□ 3 year	
☐ 6" Exhaust Flange Kits	☐ DC lighting package	□ 4 year	
		□ 5 year	
Alternator	Fuel Tank	Coverage	
Output voltage	☐ 1000 L (264 gal)	☐ Silver	
□ 400V	(With enclosure only)	☐ Gold	
□ 415V			
Temperature Rise	Control System	Certifications	
(over 40°C ambient)	Controller	□ CE	
□ 150°C	☐ GCCP 1.3	□ EAC	
Winding type	☐ GCCP 1.4	□ UKCA	
☐ Random wound	Attachments		
Excitation	☐ Ground Fault Indication		
☐ Internal excitation (IE)			
☐ Permanent magnet (PM)			

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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# **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 Fuel		Low Fuel		
Performance number	EM06	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/Nm³ (g/hp-h)	2928.1	(5.80)	2928.1	(5.80)	
CO mg/Nm³ (g/hp-h)	229.6	(0.46)	229.6	(0.46)	
HC mg/Nm³ (g/hp-h)	5.7	(0.01)	5.7	(0.01)	
PM mg/Nm³ (g/hp-h)	11.9	(0.03)	11.9	(0.03)	
Emissions* (Potential Site Variation)					
NOx mg/Nm³ (g/hp-h)	3543.0	(7.02)	3543.0	(7.02)	
CO mg/Nm³ (g/hp-h)	429.3	(0.86)	429.3	(0.86)	
HC mg/Nm³ (g/hp-h)	10.7	(0.02)	10.7	(0.02)	
PM mg/Nm³ (g/hp-h)	23.2	(0.05)	23.2	(0.05)	

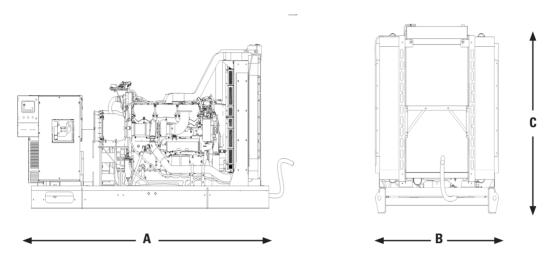
 $<sup>^*</sup>mg/Nm^3$  levels are corrected to 5% O2. Contact your local Cat dealer for further information.

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## **DE1250 GC Diesel Generator Sets Electric Power**



## **Weights and Dimensions**



Model	Dim "A"	Dim "B"	Dim "C"	Wet Weight
	mm (in)	mm (in)	mm (in)	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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