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 (To be validated)
- 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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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)	

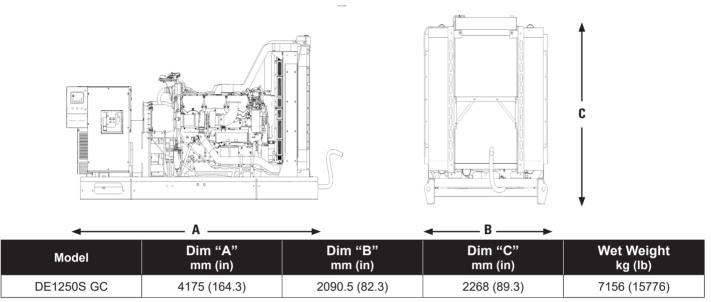
 $^{^*} mg/Nm^3 \ levels \ are \ corrected \ to \ 5\% \ O_2. \ Contact \ your \ local \ Cat \ dealer \ for \ further \ information.$

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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.