

# Cat® DE500S GC

## Diesel Generator Sets



Standby: 60 Hz



Image shown may not reflect actual configuration.

Engine Model	Cat® C13 In-line 6, 4-cycle diesel
Bore x Stroke	130 mm x 157 mm (5.1 in x 6.2 in)
Displacement	12.5 L (763 in³)
Compression Ratio	15:8:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	EUI
Governor	Electronic ADEM™ A4

Model	Standby 60 Hz kVA (ekW)	Emission Strategy
DE500S GC	625.0 (500.0)	Low BSFC

### PACKAGE PERFORMANCE

Performance	Standby 60 Hz
Genset power rating	625.0
Genset power rating with fan @ 0.8 power factor	500.0
Emissions	Low BSFC
Performance number	EM5580
Fuel Consumption	
Fuel tank capacity, litres (US gal)	686 (181.2)
100% load with fan, L/hr (gal/hr)	128.6 (34.0)
75% load with fan, L/hr (gal/hr)	96.4 (25.5)
50% load with fan, L/hr (gal/hr)	65.3 (17.3)
Cooling System <sup>1</sup>	
Radiator air flow, m³/min (cfm)	658 (23237)
Radiator air flow restriction (system), kPa (in. water)	0.125 (0.5)
Total coolant capacity, L (gal)	47 (12.4)
Inlet Air	
Max. combustion air intake restriction, kPa (in. water)	6.22 (25)
Combustion air inlet flow rate, m³/min (kg/hr)	38.13 (2690)
Exhaust System	
Exhaust stack gas temperature, °C (°F)	490.1 (914)
Exhaust gas flow rate, m³/min (cfm)	102.8 (3630)
Exhaust system backpressure (minimum allowable), kPa (in. water)	9 (36)
Exhaust system backpressure (maximum allowable), kPa (in. water)	18.66 (75)
Heat Rejection	
Heat rejection to jacket water, kW (Btu/min)	175 (9952)
Heat rejection to exhaust (total) kW (Btu/min)	467 (26558)
Heat rejection to atmosphere from engine, kW (Btu/min)	47.4 (2696)
Heat rejection to aftercooler, kW (Btu/min)	139 (7905)

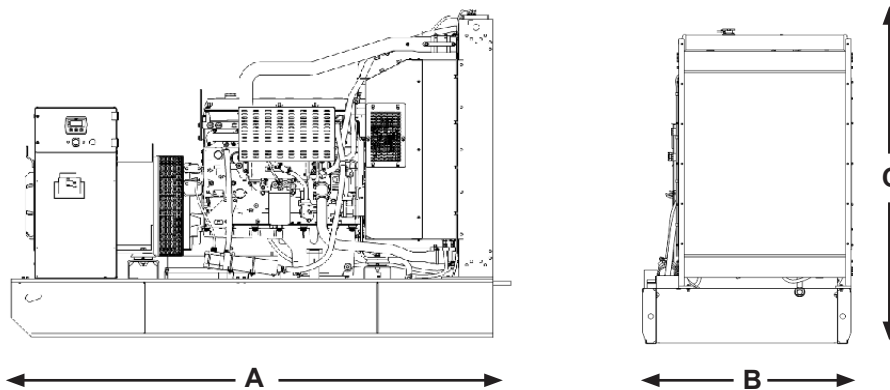
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## Electric Power



Alternator <sup>2</sup>	60 Hz				
	480V	440V	220V	380V	240V
Voltages	480V	440V	220V	380V	240V
Motor starting capability @ 30% Voltage Dip, skVA	1769	1485	1485	1108	1769
Current, amps	751.76	820.10	1503.52	1595.59	851.67
Temperature Rise, °C	130	163	163	163	130
Frame Size	A2985L41				
Excitation	S.E				

## WEIGHTS & DIMENSIONS



Length "A" mm (in)	Width "B" mm (in)	Height "C" mm (in)	Dry Weight kg (lb)
3100 (122.04)	1338 (52.6)	2168 (85.3)	3036 (6693.2)

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

### APPLICABLE CODES AND STANDARDS:

AS1359, NFPA37, NFPA70, NFPA99, NFPA110, IEC 60034-1, ISO 3046, ISO 8528, 2006/95/EC, 2006/42/EC, 2004/108/EC.  
**Note:** Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

**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.

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

### DEFINITIONS AND CONDITIONS

<sup>1</sup> For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

<sup>2</sup> Generator temperature rise is based on a 27°C ambient per NEMA MG1-32.

**LET'S DO THE WORK.™**

[www.cat.com/electricpower](http://www.cat.com/electricpower)

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