## Cat® DE33GC

## **Diesel Generator Sets**



### Standby: 50 Hz & 60 Hz



Engine Model	Cat® C3.3 Inline 4-stroke Diesel			
Bore x Stroke	105.0 mm x 127.0 mm (4.1 in x 5.0 in)			
Displacement	3.3 L (201.4 in³)			
Compression Ratio	19.25:1			
Aspiration	Naturally Aspirated			
Fuel Injection System	Inline			
Governor	Mechanical			

Image shown might not reflect actual configuration

	Standby		
Model	50 Hz kVA (ekW)	60 Hz kVA (ekW)	Emission Strategy
DE33 GC	33.0 (26.,4)	37.5 (30.0)	Low BSFC

### PACKAGE PERFORMANCE

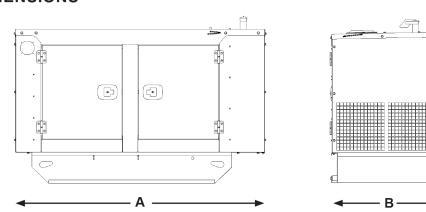
Performance	Standby			
	50 Hz	60 Hz		
Genset power rating	33.0 kVA	37.5 kVA		
Genset power rating with fan @ 0.8 power factor	26.4 kW	30.0 kW		
Emissions	Low	BSFC		
Performance number	P2490B	P2490A		
Fuel Consumption				
Fuel tank capacity, litres (US gal)	50 (	13.2)		
100% load with fan, L/hr (gal/hr)	7.9 (2.1)	9.8 (2.6)		
75% load with fan, L/hr (gal/hr)	5.8 (1.5)	6.8 (1.8)		
50% load with fan, L/hr (gal/hr)	4.1 (1.1)	5.1 (1.3)		
Cooling System <sup>1</sup>				
Radiator air flow, m³/min (cfm)	69.6 (2458)	90.6 (3200)		
Total coolant capacity, L (gal)	10.2 (2.7)			
Inlet Air				
Max. combustion air intake restriction, kPa (in H <sub>2</sub> O)	6.5 (26.1)			
Combustion air inlet flow rate, m³/min (cfm)	2.2 (76)	2.6 (91)		
Exhaust System				
Exhaust stack gas temperature, °C (°F)	520 (968)	530 (986)		
Exhaust gas flow rate, m³/min (cfm)	5.8 (205)	6.6 (233)		
Exhaust system backpressure (maximum allowable), kPa (in. water)	8.0 (2.4)	10.0 (3.0)		
Heat Rejection				
Heat rejection to jacket water, kW (Btu/min)	18.0 (1024)	22.0 (1251)		
Heat rejection to alternator, kW (Btu/min)	3.3 (188)	3.7 (210)		
Heat rejection to atmosphere from engine, kW (Btu/min)	6 (342)	6 (342)		
Heat rejection to exhaust (total) kW (Btu/min)	25.0 (1423)	34.0 (1935)		

# **DE33 GC Diesel Generator Sets Electric Power**



Alternator <sup>2</sup>		50 Hz				60 Hz		
Voltages	380	415	400	480	440	220	380	240
Motor starting capability @ 30% Voltage Dip, skVA	44	53	49	59	50	50	37	44
Current, amps	50.1	45.9	47.6	45.1	49.2	98.4	50.6	87.6
Temperature Rise, °C	163/27	163/27	163/27	163/27	163/27	163/27	163/27	163/27
Frame Size	A1737L4							
Excitation	S.E							

### **WEIGHTS & DIMENSIONS**



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

Dim "A"	Dim "B"	Dim "C"	Dry Weight
mm (in)	mm (in)	mm (in)	kg (lb)
1945 (77.3)	870 (34.3)	1238 (48.7)	959 (14,700)

<sup>\*</sup>Weight includes standard generator, Enclosure and Integral Tank base

### **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.



