

# Cat® DE220 GC

## Diesel Generator Sets



### Standby: 50 Hz



Image shown may not reflect actual configuration.

Engine Model	Cat® C7.1 Inline 4-stroke Diesel
Bore x Stroke	105.0 mm x 135.0 mm (4.1 in x 5.3 in)
Displacement	7.0 L (427.8 in <sup>3</sup> )
Compression Ratio	16.0:1
Aspiration	Turbocharged Air To Air Charge Cooled
Fuel Injection System	Inline
Governor	Mechanical

Model	Standby 50 Hz kVA (ekW)	Emission Strategy
DE220 GC	220 (176)	Low BSFC

### PACKAGE PERFORMANCE

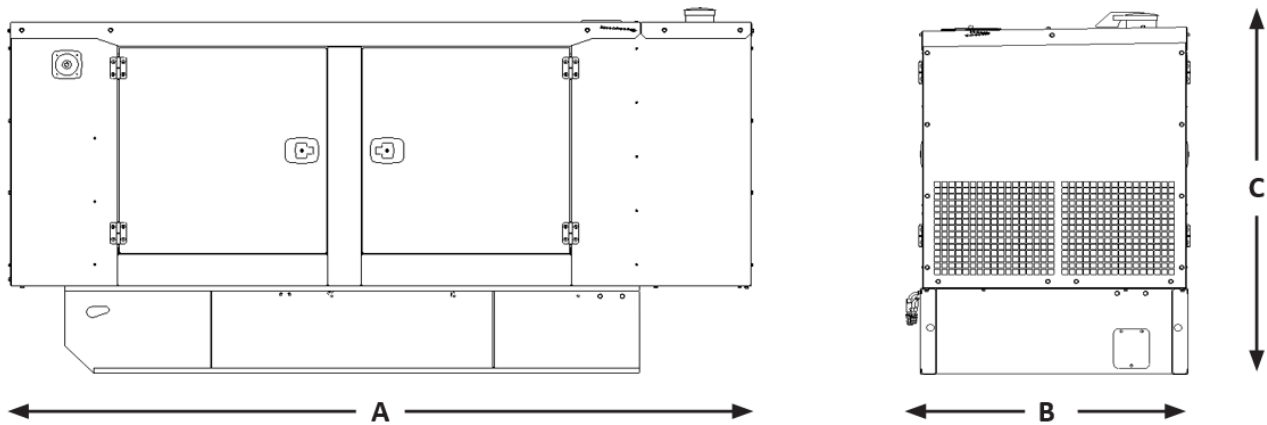
Performance	Standby
	50 Hz
Genset power rating	220 kVA
Genset power rating with fan @ 0.8 power factor	176 ekW
Emissions	Low BSFC
Performance number	P6788B
<b>Fuel Consumption</b>	
Fuel tank capacity, litres (US gal)	325 (85.9)
100% load with fan, L/hr (gal/hr)	49.2 (13.0)
75% load with fan, L/hr (gal/hr)	37.8 (10.0)
50% load with fan, L/hr (gal/hr)	25.6 (6.8)
<b>Cooling System<sup>1</sup></b>	
Radiator air flow, m <sup>3</sup> /min (cfm)	307.2 (10849)
Total coolant capacity, L (gal)	27.0 (7.1)
<b>Inlet Air</b>	
Max. combustion air intake restriction, kPa (in. water)	5.0 (20.1)
Combustion air inlet flow rate, m <sup>3</sup> /min (kg/hr)	13.2 (466)
<b>Exhaust System</b>	
Exhaust stack gas temperature, °C (°F)	550 (1022)
Exhaust gas flow rate, m <sup>3</sup> /min (cfm)	36.8 (1300)
Exhaust system backpressure (maximum allowable), kPa (in. water)	6.0 (1.8)
<b>Heat Rejection</b>	
Heat rejection to jacket water, kW (Btu/min)	81.0 (4606)
Heat rejection to alternator, kW (Btu/min)	15.2 (864)
Heat rejection to atmosphere from engine, kW (Btu/min)	13.2 (751)
Heat rejection to exhaust (total) kW (Btu/min)	158 (8985)

# DE220 GC Diesel Generator Sets Electric Power



Alternator <sup>2</sup>	50 Hz		
	Voltages	380 V	415V
Motor starting capability @ 30% Voltage Dip, skVA	545	649	601
Current, amps	329	303	318
Temperature Rise, °C	163/27		
Frame Size	A2637L41		
Excitation	S.E		

## WEIGHTS & DIMENSIONS



Length "A" mm (in)	Width "B" mm (in)	Height "C" mm (in)	Dry Weight kg (lb)
3325 (130.9)	1134 (44.6)	1666 (65.6)	1933 (4261.5)

#Weight includes standard generator, Enclosure and Integral Tank base.

**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.™**

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