

Cat® DE220 GC

Diesel Generator Sets



Standby and Prime: 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 ³)
Compression Ratio	16.0:1
Aspiration	Turbocharged Air To Air Charge Cooled
Fuel Injection System	Inline
Governor	Mechanical - G3 Class* capable

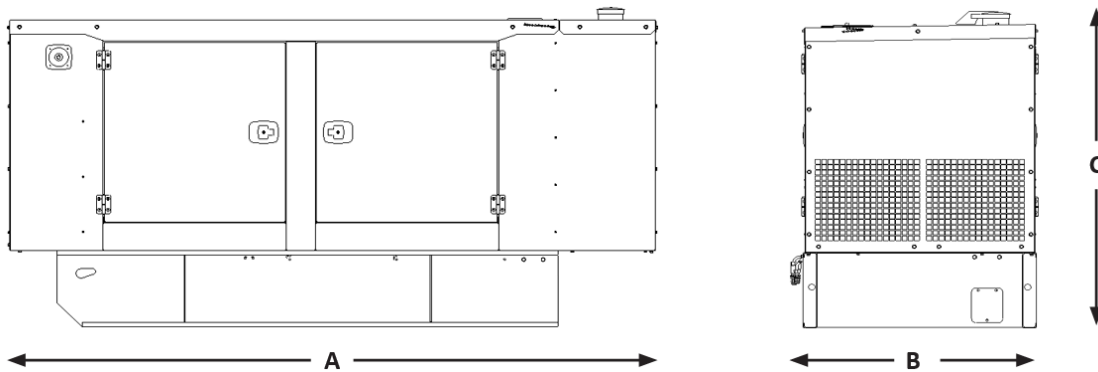
Model	Standby	Prime (SRR)	Emission Strategy
	50 Hz kVA (ekW)	50 Hz kVA (ekW)	
DE220 GC	220 (176)	198 (158.4)	Low BSFC

PACKAGE PERFORMANCE

Performance	Standby	Prime (SRR)
	50 Hz	
Genset power rating	220 kVA	198 kVA
Genset power rating with fan @ 0.8 power factor	176 ekW	158.4 ekW
Emissions	Low BSFC	
Performance number	P6788B	-
Fuel Consumption		
Fuel tank capacity, L (gal)	325 (85.9)	
100% load with fan, L/hr (gal/hr)	49.2 (13.0)	44.3 (11.7)
75% load with fan, L/hr (gal/hr)	37.8 (10.0)	34.1 (9.0)
50% load with fan, L/hr (gal/hr)	25.6 (6.8)	23.1 (6.1)
Cooling System¹		
Radiator air flow, m ³ /min (CFM)	307 (10849)	
Total coolant capacity, L (gal)	27.0 (7.1)	
Inlet Air		
Max. combustion air intake restriction, kPa (in. water)	5.0 (20.1)	
Combustion air inlet flow rate, m ³ /min (CFM)	13.2 (466)	12.0 (423)
Exhaust System		
Exhaust stack gas temperature, °C (°F)	550 (1022)	538 (1000)
Exhaust gas flow rate, m ³ /min (CFM)	36.8 (1300)	33.2 (1172)
Exhaust system backpressure (maximum allowable), kPa (in. water)	6.0 (1.8)	
Heat Rejection		
Heat rejection to jacket water, kW (BTU/min)	81.0 (4606)	78.0 (4436)
Heat rejection to alternator, kW (BTU/min)	15.2 (864)	15.2 (864)
Heat rejection to atmosphere from engine, kW (BTU/min)	13.2 (751)	12.2 (694)
Heat rejection to exhaust (total), kW (BTU/min)	158.0 (8985)	147.0 (8360)

Alternator ²	50 Hz (Standby/Prime)		
	Voltages	380	415
Motor starting capability @ 30% Voltage Dip, skVA	545	649	601
Current, Amps	329 / 296	303 / 272	318 / 286
Temperature Rise, °C	163/27		
Frame Size	A2637L41		
Excitation	S.E		

WEIGHTS & DIMENSIONS



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

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

APPLICABLE CODES AND STANDARDS:

AS1359, IEC60034-1, ISO3046, ISO8528, NEMA MG1-33, EAC,CE,UKCA.

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.

PRIME (SRR): Output available with varying load. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year. Maximum run time not to exceed 2000 hours per year.

DEFINITIONS AND CONDITIONS

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

² Generator temperature rise is based on IEC 60034-1.

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

* Governing Class capability as per ISO8528-5. Consult your local Cat dealer for configuration and site specific transient performance classification.