

Cat® DE605 GC

Diesel Generator Sets



Standby & Prime: 50 Hz



Image shown might not reflect actual configuration.

Engine Model	Cat® C15 In-line 6, 4-cycle Diesel
Bore x Stroke	137 mm x 171 mm (5.4 in x 6.8 in)
Displacement	15.2 L (928 in ³)
Compression Ratio	16:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	EUI
Governor	Electronic ADEM™ A4 – G2 Class* capable

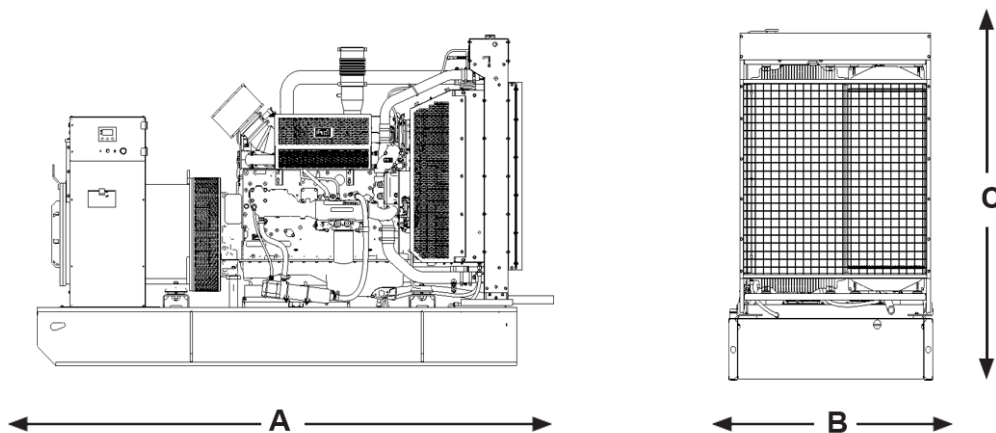
Model	Standby	Prime	Emission Strategy
DE605 GC	605 kVA	550 kVA	Low BSFC

PACKAGE PERFORMANCE

Performance	Standby	Prime
Genset Power Rating, kVA	605	550
Genset power rating with fan @ 0.8 power factor, ekW	484	440
Emissions	Low BSFC	
Performance Number	EM5622	EM5623
Fuel Consumption		
100% load with fan, L/hr (gal/hr)	119.4 (31.5)	108.6 (28.7)
75% load with fan, L/hr (gal/hr)	90.2 (23.8)	82.5 (21.8)
50% load with fan, L/hr (gal/hr)	62.5 (16.5)	57.4 (15.2)
25% load with fan, L/hr (gal/hr)	35.5 (9.4)	33.0 (8.7)
Cooling System ¹		
Radiator air flow, m ³ /min (CFM)	477 (16845)	
Radiator air flow restriction (system), kPa (in. water)	0.125 (0.5)	
Total coolant capacity, L (gal)	48 (12.7)	
Inlet Air		
Max. combustion air intake restriction, kPa (in. water)	6.2 (25)	6.2 (25)
Combustion air inlet flow rate, m ³ /min (CFM)	33.8 (1193)	31.8 (1122)
Exhaust System		
Exhaust stack gas temperature, °C (°F)	529 (984)	522 (972)
Exhaust gas flow rate, m ³ /min (CFM)	95.6 (3375)	88.4 (3119)
Exhaust system backpressure (maximum allowable), kPa (in water)	16.6 (67)	16.6 (67)
Heat Rejection		
Heat rejection to jacket water, kW (BTU/min)	171 (9725)	157 (8951)
Heat rejection to exhaust (total), kW (BTU/min)	453 (25762)	415 (23619)
Heat rejection to aftercooler, kW (BTU/min)	107 (6086)	91.3 (5195)
Heat rejection to atmosphere from engine, kW (BTU/min)	32.6 (1852)	33.2 (1889)

Alternator ²	Standby			Prime		
	Voltages	380V	415V	400V	380V	415V
Motor starting capability @ 30% Voltage Dip, skVA	1282	1722	1418	1282	1722	1418
Current, Amps	842	873	919	765	794	835
Temperature Rise, °C	163			163		
Frame Size	A3325L41			A3325L41		
Excitation	S.E			S.E		

WEIGHTS & DIMENSIONS



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
3328 (131.0)	1540 (60.6)	2187 (86.1)	3683 (8119.6)

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

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: Output available with varying load for an unlimited time. 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. 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.

Fuel Rates Fuel rates are based on diesel with a 35 API gravity; a lower heating value is 42,780 kJ/kg (18,390 BTU/lb) when used at 15°C (59°F), where the density is 850 gm/l (7.0936 lbs/gal).

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 a 27°C ambient per IEC60034-1.

* Governing Class capability as per ISO 8528-5. Consult your local Cat dealer for configuration and site specific transient performance classification.