

Cat® DE450S 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
DE450S GC	562.5 (450.0)	Low BSFC

PACKAGE PERFORMANCE

Performance	Standby
	60 Hz
Genset power rating	562.5
Genset power rating with fan @ 0.8 power factor	450.0
Emissions	Low BSFC
Performance number	EM5579
Fuel Consumption	
Fuel tank capacity, litres (US gal)	686 (181.2)
100% load with fan, L/hr (gal/hr)	119.7 (31.6)
75% load with fan, L/hr (gal/hr)	85.6 (22.6)
50% load with fan, L/hr (gal/hr)	59.6 (15.7)
Cooling System¹	
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)	38.49 (2716)
Exhaust System	
Exhaust stack gas temperature, °C (°F)	476 (889)
Exhaust gas flow rate, m³/min (cfm)	101.5 (3584)
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)	156 (8872)
Heat rejection to exhaust (total) kW (Btu/min)	456 (25932)
Heat rejection to atmosphere from engine, kW (Btu/min)	38.7 (2201)
Heat rejection to aftercooler, kW (Btu/min)	133 (7564)

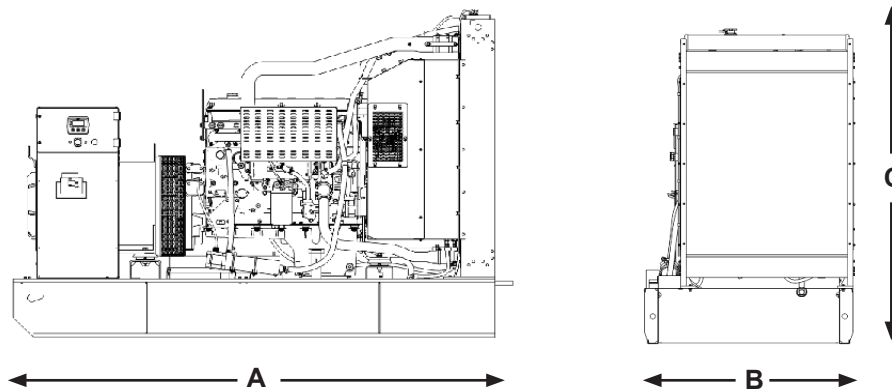
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Electric Power



Alternator ²	60 Hz				
	480V	440V	220V	380V	240V
Voltages	480V	440V	220V	380V	240V
Motor starting capability @ 30% Voltage Dip, skVA	1592	1337	1337	997	1592
Current, amps	676.58	738.09	1353.16	1476.18	766.51
Temperature Rise, °C	130	163	163	163	130
Frame Size	A2975L41				
Excitation	S.E				

WEIGHTS & DIMENSIONS



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
3100 (122.04)	1338 (52.6)	2168 (85.3)	2924 (6446.3)

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

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 NEMA MG1-32.

LET'S DO THE WORK.™

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