Cat[®] DE88 GC Diesel Generator Sets



Standby: 50 Hz & 60 Hz



Engine Model	Cat [®] C4.4 Inline 4-stroke Diesel			
Bore x Stroke	105.0 mm x 127.0 mm (4.1 in x 5.0 in)			
Displacement	4.4 L (268.5 in ³)			
Compression Ratio	17.25:1			
Aspiration	Turbocharged			
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
DE88 GC	88.0 (70.4)	100.0 (80.0)	Low BSFC

PACKAGE PERFORMANCE

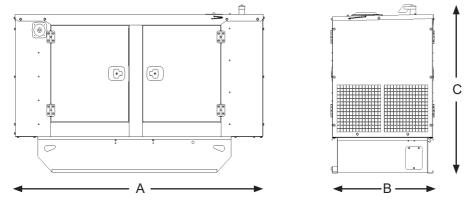
Performance	Star	Standby			
	50 Hz	60 Hz			
Genset power rating	88.0 kVA	100.0 kVA			
Genset power rating with fan @ 0.8 power factor	70.4 kW	80.0 kW			
Emissions	Low	BSFC			
Performance number	P2516B	P2516A			
Fuel Consumption					
Fuel tank capacity, litres (US gal)	149	(39.4			
100% load with fan, L/hr (gal/hr)	20.4 (5.4)	23.8 (6.3)			
75% load with fan, L/hr (gal/hr)	15.2 (4.0)	18.0 (4.8)			
50% load with fan, L/hr (gal/hr)	10.5 (2.8)	12.7 (3.4)			
Cooling System ¹					
Radiator air flow, m³/min (cfm)	121.2 (4280)	140.4 (4958)			
Total coolant capacity, L (gal)	13.0	13.0 (3.4)			
Inlet Air					
Max. combustion air intake restriction, kPa (in H ₂ O)	8.0 (32.1)			
Combustion air inlet flow rate, m³/min (cfm)	5.1 (180)	6.5 (230)			
Exhaust System					
Exhaust stack gas temperature, °C (°F)	580 (1076)	560 (1040)			
Exhaust gas flow rate, m³/min (cfm)	13.3 (470)	15.9 (560)			
Exhaust system backpressure (maximum allowable), kPa (in. water)	10.0 (3.0)	15.0 (4.4)			
Heat Rejection					
Heat rejection to jacket water, kW (Btu/min)	51.0 (2900)	57.0 (3242)			
Heat rejection to alternator, kW (Btu/min)	6.7 (381)	7.1 (404)			
Heat rejection to atmosphere from engine, kW (Btu/min)	14 (797)	15 (854)			
Heat rejection to exhaust (total) kW (Btu/min)	59.0 (3358)	71.0 (4041)			

DE88 GC Diesel Generator Sets Electric Power



Alternator ²		50 Hz				60 Hz		
Voltages	380	415	400	480	440	220	380	240
Motor starting capability @ 30% Voltage Dip, skVA	154	183	170	204	172	172	130	154
Current, amps	133.7	122.4	127	120.3	131.2	262.4	149.5	240.6
Temperature Rise, °C	150/40	150/40	150/40	130/40	130/40	130/40	163/27	150/40
Frame Size	A2137L4							
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)}
2275 (89.6)	1099 (43.3)	1465 (57.7)	1245 (2744.8)

#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

- ¹ For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.
- $^{\rm 2}$.Generator temperature rise is based on a 27°C ambient per NEMA MG1-32.

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