Cat® C1C2 Diesel Generator Sets



Standby & Prime: 50 Hz



Image shown might not reflect actual configuration.

Engine Model	Cat® C1.5 In-line, 4-Stroke Diesel	
Bore x Stroke	84 mm x 90 mm (3.3 in x 3.5 in)	
Displacement	1.496 L (91.29 in³)	
Compression Ratio	22.5:1	
Aspiration	Naturally Aspirated	
Fuel Injection System	System Inline	
Governor Mechanical		

Model	Standby	Prime	Emission Strategy
DE40E00	50 Hz	50 Hz	Low BSEC
DE12E0S	12 kVA	11 kVA	Low BSFC

PACKAGE PERFORMANCE

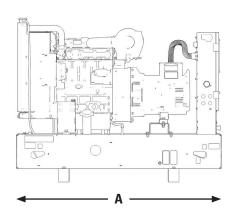
Performance	Standby	Prime
Frequency	50 Hz	50 Hz
Genset Power Rating	12 kVA	11 kVA
Genset power rating with fan @ 1.0 power factor	12 ekW	11 ekW
Emissions	Low	BSFC
Fuel Consumption		
100% load with fan, L/hr	3.83	4.49
75% load with fan, L/hr	2.77	3.11
50% load with fan, L/hr	2.00	2.24
Cooling System ¹		
Radiator air flow restriction (system), kPa	30.4	30.4
Radiator air flow, m³/min	41.4	41.4
Total coolant capacity, L	6.0	6.0
Inlet Air		
Combustion air inlet flow rate, m³/min	1.1	1.0
Max. Allowable Combustion Air Inlet Temp, °C	53	53
Exhaust System		
Exhaust stack gas temperature, °C	580	470
Exhaust gas flow rate, m³/min	2.2	2.2
Exhaust system backpressure (maximum allowable), kPa	10.2	10.2
Heat Rejection		
Heat rejection to coolant, kW	14.4	13.1
Heat rejection to aftercooler, kW	3.9	3.6
Heat rejection to exhaust (total), kW	11.5	10.5

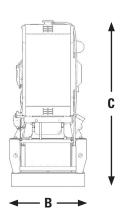
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Alternator ³		50 Hz	
Voltages	240 V	230 V	220 V
Motor starting capability @ 30% Voltage Dip, skVA	21 kVA	22 kVA	21 kVA
Current, Amps	50	52	55
Temperature Rise,°C		125	
Frame Size		M1417L4	
Excitation	S.E		

WEIGHTS & DIMENSIONS





Dim "A"	Dim "B"	Dim "C"	Dry Weight
mm (in)	mm (in)	mm (in)	kg (lb)
1500 (59.1)	860 (33.9)	895 (35.2)	

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

APPLICABLE CODES AND STANDARDS:

AS1359, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-33, 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.

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 ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year

RATINGS: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 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 Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77°F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 BTU/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.
- ³ Generator temperature rise is based on a 40°C ambient per NEMA MG1-32.

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