# Cat<sup>®</sup> C1C2 DIESEL GENERATOR SETS



#### Standby & Prime: 50Hz



Image shown might not reflect actual configuration

Engine Model	Cat <sup>®</sup> C1.5 ACERT™ In-line, 4-Stroke diesel
Bore x Stroke	84mm x 90mm (3.3in x 3.5in)
Displacement	1.496 L (91.29 in <sup>3</sup> )
Compression Ratio	22.5:1
Aspiration	Naturally Aspirated
Fuel Injection System	Inline
Governor	Mechanical

Model	Standby	Prime	Emission Strategy
DE12E0S	12 kVA	11 kVA	Low BSFC

#### PACKAGE PERFORMANCE

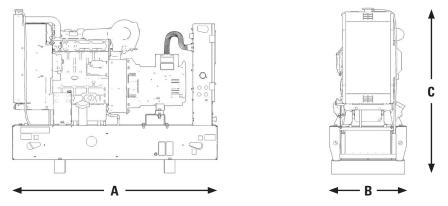
Performance	Standby	Prime
Frequency	50 Hz	50 Hz
Genset Power Rating	12 kVA	11 kVA
Genset power rating with fan @ 0.8 power factor	7 ekW	6 ekW
Emissions	Low	BSFC
Fuel Consumption		
100% load with fan, L/hr	3.83	4.49
75% load with fan, L/hr	2.77	3.11
50% load with fan, L/hr	2.00	2.24
Cooling System <sup>1</sup>		
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, m <sup>3</sup> /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, m <sup>3</sup> /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 <sup>3</sup>			
Voltage	240 V	230 V	220 V
Phase	1	1	1
Frequency	50 Hz	50 Hz	50 Hz
Motor starting capability @ 30% Voltage Dip	21 skVA	22 skVA	21 skVA
Rated Current	50 amps	52 amps	55 amps
Frame Size	M1417L4	M1417L4	M1417L4
Current	25.0 amps	26.0 amps	27.3 amps
Excitation	S.E		
Temperature Rise	125°C		

#### **WEIGHTS & DIMENSIONS**



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

Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
1500 (59.1)	860 (33.9)	895 (35.2)	333 (734.1)

#### APPLICABLE CODES AND STANDARDS:

AS1359, CSA C22.2 No100-04, UL142, UL489, UL869, UL2200, 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**

- <sup>1</sup> For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.
- <sup>2</sup> 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.
- <sup>3</sup> UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.

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